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N an industry where hundred-year-old firms are common (several European seed companies have been operating over 200 years) a golden anniversary is not highly significant. But we are fifty years old only once! And what an opportunity it affords to look back a few years and also to think about the future!
The story of the Ball Company is largely the personal history of George J. Ball, father of the present generation of Ball brothers. Born in 1874 near Lebanon (Warren Co.), Ohio, he had a considerable family background in agriculture.

Here is a family story told about the immigration of George J. Ball's grandfather to the United States from Germany.
"He was a native of Mannheim, Germany and had six sons. In order to keep these boys well occupied he leased a plot of ground in the country to grow vegetables.
"When harvest time came the government authorities proposed to levy a tax on his produce. He refused, and since he was a six-footer and of powerful build, so the story goes, the officers let things 'ride along' for a time.
"However, they did eventually lay down the law to him. So, resentfully, he paid the tax, determining then and there to come to America, 'the land of the free and the home of the brave'."

Working in Galloway's Greenhouse near Cincinnati at the age of 14, George Ball was attracted to the flower business early in life. Both before and after a tour of military service which took him around the world, his life was devoted to horticulture. In the service he took part in the Cuban campaign under Teddy Roosevelt, for whom he always had great admiration, and a year after completion of this campaign he re-enlisted for a term of duty which included the


Diary from which the accompanying quotations were selected. Philippine campaign.

In the early years he kept a diary-acquiring this habit during his military tour when long sea voyages and drawn-out military campaigns allowed time for such things.

It seems fitting to quote some entries from this diary which give a word picture of those early days.

## FIRST, SOME NOTES ON GREENHOUSE OPERATIONS . . . .

(At this time he was foreman of Mr. Brod's greenhouse at Niles Center, Illinois.)
"April 6, 1903. Day foreman leaves today because of poor pay. He received $\$ 38.00$ per month. The teamsters will probably strike for $\$ 45.00$ instead of $\$ 40.00$. The propagator got a lot of carnation cuttings mixed up. There is surely a lot of worrying and thinking to keep a place of this kind going.
(Editor's Note: We know a number of growers who might say things haven't changed much!)
"June 21, 1903. Rode up to Poehlman's today, visiting both places. The range going up at the new place is no doubt the most modern one about Chicago. Putting up separated houses seems to


At Poehlman's about the turn of the century. Geo. J. Ball at extreme left. Note hand cranked soil grinder.
be out of favor among modern builders, all the new houses here being together. Detached houses occupy too much space and require too many walls, which is no small item in modern building."

## A HISTORICAL ENTRY

"Dec. 30, 1903. Started putting in carnation cuttings today. Was called to the city this P.M. and got down in time to see wagon load after wagon load of burned women and children carried away from the New Iroquois Theatre that caught fire about 3:30 during a matinee performance. Last night the estimated dead was over 700 . It was a gruesome sight to see on the streets of a great city."

## DESCRIBING AN EARLY ASTER CROP ON LAND LEASED BY HIM IN NORTHWEST CHICAGO

"April 25, 1904. Sowed an ounce of late branching aster seed received today from Dreer in place of an ounce recently received of them that did not come up.
"June 3, 1904. Finished planting asters today, being just two weeks in getting out what we believe to be about 45,000 , at least.
"July 5, 1904. A lotofour asters are beginning to look awfulsick and prospects are looking cloudy. The trouble with all the affected ones is stem rot.
"July 26, 1904 The following appeared in The Florist Review of 7.21 Chicago Notes. It was probably


Geo. J. Ball cutting the Aster crop described in diary quotation on this page, Sept., 1904. Early diary quotation on this page, Sept., 1904. Eariy field.


Ball Greenhouses at Glen Ellyn. It has been said that at the time of construction of these houses, Sweet Peas were so profitable that a new house could be built and paid for by the first year's Sweet Pea returns!
put up by my wholesaler, Mr. Benthey. At least it is an exaggera tion.
'George J. Ball, who has the Harms Park Floral Company place, is growing two acres of asters which are giving indications of a very fine large crop next month. There is no sign of disease in the field.'
"Sept. 5, 1904. Labor Day, and it has been one of labor for me, cutting asters as hard as I could until 6:00 this evening. Where they are plentiful can cut 500 per hour but that is the limit. Our asters are selling at 1c each, and that is considered a good price. The perfect whites bring $11 / 2 c$. (See illustration.)
"Dec. 10, 1904. Gathered some aster seed today of a patch of selected white. It is too late to do this to advantage, most of the seed being blown away."

## FIFTY YEARS BACK ....

In 1905 at the age of 31 George Ball started continuous growing operations in a leased establishment in northwest Chicago. This included some seed saving and a limited amount of carnation plant shipping in addition to spring sale of bedding plants. These early years of flower growing were years of struggle of the sort familiar to many tradesmen. However, each year's operation seemed to become more successful, and in 1909 an important move was made to land which was purchased at Glen Ellyn, Illinois.

In 1908, a year before this move, he married a young Chicago school teacher, Anna Kruse.

In Glen Ellyn, what is now the firm's principal line of businessgrowing and selling flower seeds-was established with Asters, Sweet Peas, and Calendulas.

It was shortly after the move to Glen Ellyn that he got into the seed business by being approached for seed by growers who had seen his cut flower strains at the wholesale markets. Limited seed sales were made during the years preceding World War I. Many seed varieties which appear in this catalog were originated from selections out of commercial crops grown during this period. His first printed price list or "catalog" was published in 1918. One of the first lists which we have on record contains reprints of testimonial letters from a number of growers including Fred A. Danker, Albany, New York; Christian B. Groff, Lancaster, Pa.; Dale Estate, Brampton, Ontario; A. Washburn \& Sons, Bloomington, Ill.; J. W. Davis Co., Terre Haute, Ind.; Joy Floral Co., Nash-


Seedsmen in California, June 1922. Left to right: Frank G. Cuthbertson, Harry Buekman, Dr. Franklin, L. D. Waller, Geo. J. Ball, Harry Bowen.
ville, Tenn.; and Wolfe the Florist, Waco, Texas.
It was in these early years of the seed business that policies of the firm were established which still control company operations today. As his seed business developed, he established numerous contacts throughout the world by personal inspection of flower seed production areas in Europe, America, and the Far East. He retained control of his own developed "Ball Strains" of


This is the first meeting of our salesmen of which we have a picture record-Summer 1936. Left to right: Franz Neumann, Wisconsin (died record-Summer 1936. Left to right: Franz Neumann, Wisconsin (died
1953 ); Oscar Strand, Michigan-Ohio (died 1945); George K. Ball; Earl Willison, Midwest; John Masten, South. Geo. J. Ball; Fred Pierce, MidWillison, Midwest; John Masten, South. Geo. J. Ball; Fred Pierce, Mid-
west; Walter Gatewood, Midwest (died 1949) ; Jim Tufts (New Engwest; Walter Gatewood, Midwest (died 1949) ; Jim Tufts (New Eng-
land); Messrs. Hicks, son and father, of Canada; Vic Ball; F. D. land) ; Messrs. Hicks, son and father, of Canada; Vic Ball; F. D.
Balzhiser; Charles Moles, New York area. The Ball sales force, started Balzhiser: Charles Moles, New York area. The Ball sales force, started
in 1930 , now consists of 18 men in the United States, and Roy Nicholson agency for seeds in Canada.
important cut flower and bedding plant seed varieties by either producing the seed himself in the firm's greenhouses or shipping greenhouse-grown "planting stock" to commercial seed growers who would return the seed crop.
These policies are still followed by our firm. Where the required quality of seed is unobtainable from commercial sources we grow it in our greenhouse (examples: Coleus, Begonia, Hybrid Snap, some Stocks).

This technique of quality control which has made Ball seeds well known throughout the world is also furthered by extensive trialing of our own as well as other "strains" of important seed varieties, both under glass and outdoors.
Here's the first issue of Grower Talks. Paid circulation now about 8,000


The firm remained in the Glen Ellyn location until 1927, when several greenhouses and an office building were erected at West Chicago, ten miles away. Also, it was during this period that he wrote "Better Sweet Peas", describing the culture of this crop. This book was widely circulated among commercial Sweet Pea growers of that day.
In spite of the great depression, good sales gains were made in the seed business in the 1930's. George K., oldest son of Mr. Ball and now Company President, joined the staff in 1931. To help his grower customers keep informed about the latest and best growing practices, George J. Ball began publication of the magazine, "Grower Talks", in 1937. This grower magazine has been published each month continuously since that date and is being carried on under the editorship of son Victor Ball, who became affiliated with the firm after completing the curriculum in floriculture at the University of Illinois in 1936. Vic is also manager of the company greenhouses, and is especially interested in the latest developments in Mum growing. One year later, Robert Ball, third son of George J., came to work. He is now in charge of Bulb and Supply Warehouse and Shipping.

Apart from writing, travel provided George Ball considerable recreation. He made several trips to Europe and one to Japan in the thirties, establishing valuable contacts with seed suppliers. Column Stocks were introduced to this country as a result of travels in the early thirties in Germany, where they were being grown commercially.

A modern, fireproof, two-story, air-conditioned office and seed warehouse was constructed at West Chicago in 1933. An addition was added in 1938 and another in 1950 to accommodate an in-
creased volume of business in seeds. Also, additional space was needed during the late thirties and forties for new lines of merchandise, including rooted Mum cuttings, plants, bulbs, and certain supplies.
Certainly one af the high points of George J's career was reached when at Toronto, Canada, in 1938, he was elected president of the Society of American Florists.

Of recent years we need add little. An I.B.M. system was installed after the war in the firm's order-writing and billing operations, making for more rapid processing of orders, even improving the "same day service" on seed orders which had become a policy of the firm at its inception. Carl, youngest son of George Ball, joined the firm in $1947^{\circ}$ after completion of a war-interrupted college course at the University of Illinois, and is now in charge of the firm's seed business.

While attempting to realize a long-time ambition to circle the globe a second time (first during the Spanish-American War), George Ball suffered a heart attack while crossing the Pacific. He returned home, and several months later in September, 1949, passed away at the age of 75 .

The Ball Brothers and the entire Ball organization wish to take this opportunity to thank the trade for their generous support of their efforts to serve the florist industry. To be able to look back upon several decades of a cordial and mutually profitable relationship with many firms throughout the country is, indeed, one of the real pleasures of doing business. And in these times of important developments in our industry, we regard the future as a challenge and an opportunity to carry on the Ball reputation for "All the Best-Nothing Else".

This modern $21 / 2$-acre range of glass plus office buildings has been the place of business of the Ball Company since the move from Glen Ellyn in 1927.


## GROWER TALKS

For the latest information on new varieties from Ball Flowering Trials, cultural techniques, growing schedules, insect and disease controls, and many other grower problems, subscribe to GROWER TALKS. An up-to-the-minute monthly digest of what's new and interesting in the business of growing flowers.

## Price:

90c for 1 year; 3 years for $\$ 2.50$. Binder for 24 issues, \$1.50.

## New Varieties for ' 55

We couldn't get them all on the next page, so we put a few new varieties here.

## MARIGOLD

Cupid Gold. Rich golden shade, between yellow and orange. Very distinct.
Tr. pkt., 50c; $1 / 8 \mathrm{oz} ., 90 \mathrm{c}$; $1 / 4 \mathrm{oz} ., \$ 1.75$; 1 oz ., $\$ 5.00$.
Lemon Drop. Excellent new dwarf yellow.
Tr. pkt., 40c; $1 / 4 \mathrm{oz} ., \$ 1.25$; $1 \mathrm{oz} ., \$ 3.75$.
SAINTPAULIA (African Violet)
White. $90 \%$ true; variable foliage. 300 seeds, $\mathbf{\$ 2 . 5 0}$.
Double Mixed. $50 \%$ double. 300 seeds, $\$ 3.00$.
VERBENA
Crystal. Dwarf spreading. Pure white.
Tr. pkt., 50c; $1 / 4 \mathrm{oz}$., $\$ 1.50$; 1 oz., $\$ 4.50$.
Firelight. Clear, bright red. Bush type.
Tr. pkt., 55c; $1 / 4$ oz., $\$ 1.30$; 1 oz., $\$ 4.00$.


PETUNIA, PRIMA DONNA


BALL'S 1955 A.A.S. WINNER, CELOSIA TOREADOR

The two most important novelties for '55. Both were high point All-America Bronze Medal winners for 1955 . National publicity on these subjects is sure to create a demand for plants this spring. Alert growers should not be without them.

## PETUNIA, PRIMA DONNA $F_{1}$ Hybrid Grandiflora

Large, heavily ruffled bright rose flowers with darker veins on vigorous, spreading, base-branching plants. Quite similar to the popular Ballerina except for color, and promises to be equally valuable. $1 / 2$ tr. pkt., $\$ 1.35$; tr. pkt., $\$ 2.50$; $1 / 128$ oz., $\$ 4.50$; $1 / 64 \mathrm{oz} ., \$ 8.00$; $1 / 32 \mathrm{oz}$., $\$ 15.50$; $1 / 16 \mathrm{oz}$., $\$ 20.00$.

## Nem <br> Varieties for '55 <br> NOTE: The best bedding plant varieties will not sell well if they are not properly grown and merchandised. We call your attention to several important new bedding plant growing-selling containers pictured and described on pages 69 and 70, including the new Market-Pak and Jiffy-Pot. no blooms.

## CELOSIA, TOREADOR

## "Fashion Flower for Fifty-Five"

Large combs up to 12 inches across of lustrous, bright red with scarlet highlights are carried on plants $18-20$ inches high. Stems are very stiff and sturdy with luxurious, bright green foliage. Most plants produce but one stem with one enormous comb, the balance produce several base-branching stems, each with a large comb.
Tr. pkt., $\$ 1.00 ; 1 / / \mathrm{oz} ., \$ 2.20 ; 1 / 4 \mathrm{oz} ., \$ 4.00 ; 1 \mathrm{oz} ., \$ 12.00$.

## AQUILEGIA

McKanna's Giant. Extra long-spurred mixture. All-America Bronze Medal winner for 1955. Perennial.
$1 / 46$ oz., $\$ 1.50 ; 1 / 8 \mathrm{oz} ., \$ 2.75$; $1 / 4$ oz., $\$ 5.00$; $1 \mathrm{oz} ., \$ 16.00$.

## ASTER

Purple Ball. Dark purple. A new variety in the large flowered fully double "Ball" series.
Tr. pkt., \$1.75; 1/4 oz., \$3.20; $1 \mathrm{oz} ., \$ 9.60$.

## CELOSIA

Red $\mathcal{E}$ Gold. Semi-dwarf Cristata. A striking combination of colors, both on the same cockscomb head!
Tr. pkt., 50c; $1 / 8 \mathrm{oz}$, , $\$ 1.50 ; 1 / 2 \mathrm{oz}$., $\$ 5.00$.
Forest Fire. Semi-tall Plumosa type. Extremely colorful and showy. Attracted considerable attention in our trials last summer, even though it was located "off the beaten path."
Tr. pkt., 50c; $1 / 4 \mathrm{oz} ., \$ 1.50 ; 1 \mathrm{oz}$., $\$ 4.50$.

## COLEUS

Red Rainbow (Ball Original No. 5). A bright combination of deep mahogany-red and brilliant carmine-rose edged green.
Candidum. Brilliant green and soft ivory. Limit 1 tr. pkt.
Price above two, each: $1 / 2$ tr. pkt., $\$ 1.50$; tr. pkt., $\$ 2.50$.

## MORNING GLORY (Ipomoea)

Candy Pink. A large flowered clear pink. A very warm, new shade. Tr. pkt., 35 c; $1 / 4 \mathrm{oz}$., $\$ 1.00$; $1 \mathrm{oz} ., \$ 3.00$.

Also turn to page 26 for a description of Ball's new offer in plastic color pictures of bedding plant varieties to be used as point-of-sale aids by bedding plant growers. We believe these Plasticards will be very helpful in moving flats which contain

## PANSY

Color Carnival. Superb color mixture, similar in color and growth to Roggli originator's mixture.
Tr. pkt., $\$ 1.50$; $1 / 8 \mathrm{oz}$., $\$ 3.75$; 1/4 oz., $\$ 7.00 ; 1 \mathrm{oz}$., $\$ 22.00$.

## PETUNIA

Blue Moon. All-Double Canadian. Purple-blue. The dwarfest blue double medium flower size, well fringed, full double. $1 / 2$ tr. pkt., $\$ 2.50$; tr. pkt., $\$ 4.00$; $1 / 128 \mathrm{oz}$., $\$ 7.60 ; 1 / 64 \mathrm{oz}$, \$14.45; 1/32 oz., \$28.00.
Flirt. $\mathrm{F}_{1}$ Hybrid Grandiflora. A new shade of pink in Petunias. $1 / 2$ tr. pkt., $\$ 1.35$; tr. pkt., $\$ 2.50$; $1 / 128$ oz., $\$ 4.50$; $1 / 64 \mathrm{oz}$., \$8.00; 1/32 oz., \$15.50; 1/16 oz., \$29.00.
Brilliancy. $\mathrm{F}_{1}$ Hybrid Multiflora. The brightest deep rose Petunia we offer. $1 / 2$ tr. pkt., $\$ 1.00$; tr. pkt., $\$ 1.75$; 1 亿12s oz., \$3.50; $1 / 64 \mathrm{oz} ., ~ \$ 6.50 ; 1 / 32 \mathrm{oz} ., \$ 11.70 ; 1 / 16 \mathrm{oz}$., $\$ 20.00$.

## $F_{1}$ Hybrid "INDIAN SERIES" Multifloras

Grow and sell these important new Multiflora hybrids with Comanche.
Paleface. Pure white. Apache. Bright rose-red. Sioux. Medium salmon.

Above 3, each: $1 / 2$ tr. pkt., \$1.00; tr. pkt., \$1.75; $1128 \mathrm{oz} ., \$ 3.50$; $1 / 64 \mathrm{oz}$., $\$ 6.50$; $1 / 32 \mathrm{oz} ., \$ 11.70$; $1 / 66 \mathrm{oz}$,, \$20.00.

See Page 2 for More New Varieties.

## Versatile Dauble Petunias FOR BEDDING, POTS, OR COMBINATIONS

## Growing and Selling DOUBLE PETUNIAS at a PROFIT!

Uses of doubles range all the way from flat sales (we have seen them priced as low as $\$ 1.25$ for a "half-flat" of 40 ) to individual, well shaped 5 -inch potted plants retailing for several dollars.

- Doubles are becoming increasingly popular for sale out of flats, bands, or pots for bedding use. Many bedding plant growers are selling them for the same price as single Petunias.
- For combinations-boxes or pots-they can't be beat! Large, full, double, long-lasting blooms in bright colors on compact plants.
- Many growers use 3 -inch or 4 -inch pots of well developed blooming doubles for the more "expensive" bedding plant trade. The Ball All-Double Mixture is especially good for this purpose.
However you use them, Ball All-Double Petunias can make money for you-they are the world's finest strains; tested, selected varieties from Canada, the United States, and Japan. Our recommendations are based upon complete trials of all available varieties, both in 3 -inch pots in our greenhouses in the spring, and outside in our summer trials.


PETUNIA SPECIALIST
Carl Hellgren (above) and A. E. Bjork, Glenbard Gardens, Lombard, Illinois, who are among the most progressive bedding plant growers in the Chicago area, make a specialty of Double Petunias, for sale both out of flats and out of 3-inch pots. They finish about 10,000 Petunias each spring for sale out of 3 -inch pots for 25 c each retail. Half of these are doubles-Ball All-Double Mix, two of which are shown being held by Mr. Hellgren in the above picture.
Many flat growers say it is impossible for them to make money with pots; a few growers who grow exclusively in pots say they can't make out handling flats! Here is one unique example of a grower who has adapted his growing to both markets-"Chicago half-flats" containing 40 plants each for the price buyers, and 3 -inch pots for those who want better established plants.

## - BALL ALL-DOUBLE MIXTURE

Our top quality all-purpose double mixture, containing liberal portions of the most popular straight colors blended by formula with our well known large flowered Canadian strain. Varieties contained in this mixture are selected for uniformity of height and blooming date. All important double Petunia colors are represented in this strain. Our finest double mixture. $1 / 2$ tr. pkt., $\$ 2.50$; tr. pkt., \$4.00; 1/128 oz., $\$ 7.60 ; 1 / 64$ oz., $\$ 14.65$; 1/32 oz., \$28.00.

## CANADIAN STRAINS MIXTURES

- Canadian Mixture, Improved. Basically improved by the addition of more fine rose, pink and salmon shades.
$1 / 2$ tr. pkt., $\$ 2.00$; tr. pkt., $\$ 3.50$; $1 / 228$ oz., $\$ 6.65$; $1 / 64 \mathrm{oz}$., \$12.60; $1 / 32$ oz., $\$ 24.00$.
Colossal Shades of Rose, Imp. The largest flowered All-Double Petunia. Shades of pink and salmon-rose.
$1 / 2$ tr. pkt., $\$ 1.75 ;$ tr. pkt., $\$ 3.00$; 1 亿28 oz., $\$ 6.50$; $1 / 64 \mathrm{oz} .$, \$11.75; 1/32 oz., \$22.00.


## SEPARATE COLORS

- Blue Moon. (New-pictured in arrangement on opposite page.) The most uniformly dwarf and free flowering dark blue double Petunia thus far. Medium sized, fully double blooms on uniform, well shaped plants.
$1 / 2$ tr. pkt., $\$ 2.50 ;$ tr. pkt., $\$ 4.00$; 1/128 oz., $\$ 7.60$; $1 / 64 \mathrm{oz} .$, \$14.45; 1/32 oz., \$28.00.
- Cotton Candy. (New.) An appealing, soft creamy salmon suffused with pink, reminiscent of the childhood treat from which it derives its name. Extra large, fully double flowers borne in abundance on vigorous but dense plants. Fine for pots or bedding. Better try some of this.
$1 / 2$ tr. pkt., $\$ 2.00$; tr. pkt., $\$ 3.50$; $1 / 128$ oz., $\$ 6.65$; $1 / 64 \mathrm{oz} .$, \$12.60; 1/32 oz., \$24.00.
- Canadian Queen. Pictured in arrangement, opposite page. A very fine, true pink double, somewhat lighter than Rose of Canada. The large, well ruffled flowers are carried nicely above the compact, bushy plants. A first class, all-around double Petunia. $1 / 2$ tr. pkt., $\$ 2.75$; tr. pkt., $\$ 4.50$; $1 / 128$ oz., $\$ 8.50$; 1/64 oz., \$16.00.
America. Medium sized bright rose flowers very freely produced on a medium tall plant. If pinched once will produce a very nice pot plant. $1 / 2$ tr. pkt., $\$ 1.35$; 1r. pkt.. $\$ 2.50$; $1 / 128$ oz., \$4.50; 1/6. oz., \$8.00; 1/3. oz., \$14.50.
Northern Lights. Shades of medium deep rose with some bi-colored types. Typical fine Canadian habit of growth.
Black Prince. A bright Burgundy wine color. Flowers are only medium in size, but freely produced.
Rose of Canada. Fully double, bright medium rose flowers about 3 inches across are freely produced on compact. bushy plants.
Prices above 3 , each: $1 / 2$ tr. pkt., $\$ 2.00$; tr. pkt., $\$ 3.50$; $1 / 228$ oz., $\$ 6.65$; 1/64 oz., $\$ 12.60$; 1/82 oz., $\$ 24.00$.

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## GLORIOUS ( $\left.\begin{array}{c}\text { American }\end{array}\right)$ STRAINS

- ALLEGRO
(Pictured in arrangement above.) Medium to large, fully double flowers of clear, bright salmon are carried on fairly dwarf plants. An attractive color in the All-Doubles and the finest in its color class. $1 / 2$ tr. pkt., $\$ 2.75$; tr. pkt., $\$ 4.50$; 1/128 oz., \$8.50; 1/64 oz., \$16.00.
- Caprice. (Pictured in arrangement above.) Medium sized rosepink flowers are carried on fairly dwarf plants. Our 1954 flowering trials revealed some improvement in uniformity of this variety. Certainly one of the best rose doubles available.
- Sonata. (Pictured in arrangement above.) Extra large, fully double, pure white flowers. Should be pinched to encourage best plant habit.
Minuet. (Pictured in arrangement above.) Medium sized lavender. Tall; should be pinched.
Nocturne. Elk's Pride purple, medium large flowers are borne on vigorous, but compact plants.
Prices above 4, each: $1 / 2$ tr. pkt., $\$ 2.75$; tr. pkt., $\$ 4.50$; 1128 oz., $\$ 8.50$; $1 / 64$ oz., $\$ 16.00$.
Glorious Mixture. Contains both tall and dwarf types in all PanAmerican colors. In transplanting, be sure to use both large and small seedlings, thus insuring a complete range of colors. 1/2 tr. pkt., \$2.25; tr. pkt., \$4.00; 11228 oz., \$7.60; 1/64 oz., \$14.45; 1/32 oz., \$28.00.


## CULTURAL SUGGESTIONS

Doubles must be sown earlier than ordinary Petunias to bloom at the same time. We recommend (Chicago, $50^{\circ}$ ) January 1 sowing for strong 3-inch for bedding plant sales in late May. For Mother's Day combinations, heavy 3 -inch should be sown December 15 no later. For 4- or 5-inch for April and May potted plant sales, a well shaped plant with several blooms needs a November 15 sowing. Doubles, like other Petunias, need good drainage, and cool tem-peratures-they will lose their dwarf habit of growth if temperatures are run up above $55^{\circ}$ (unless there is an abundance of sunshine to offset this).
Certain varieties need one pinch to retain suitable shape for finished plants. They all break very readily. Sonata, Snowball, and Minuet are especially responsive to a pinch.

## VICTORIOUS (Japanese) STRAINS

Gaiety. The blotched or variegated flowers combine bright rose-pink with contrasting pure white to produce the "Strawberries in cream" effect. The blooms are medium large, well doubled and fringed, and are carried on dwarf, base-branching plants qualities which go to make an excellent Petunia for pots. The most popular Victorious variety. Pictured above.
Illumination. The deepest, brightest rose in double Petunias. Orchid Beauty, Improved. Orchid, heavily veined deep violet. Fantasy. (Purple and White.) Striped purple and white.

- Attraction. Striking, brightly colored rose and white mottled. Medium habit.
- Pink Perfection (World Beauty). Deep rose color and uniformly dwarf growth.
Snowball. Pure white, average flower size, some small flowered types. Needs pinching for best growth habit.
Blue Brocade. Purple. Rather tall and small flowered in our 1954 trial. Prefer Nocturne.
Victorious Mixture. We blend this mixture ourselves from the above varieties.
Prices above 9, each: $1 / 2$ tr. pkt., \$2.25; tr. pkt., \$4.00; 1/128 oz., \$6.50; $1 / 64$ oz., \$12.00; $1 / 32$ oz., $\$ 22.00$.


## Ask the Man Who Grows Them!

Mr. W. D. Hall, Wayne Greenhouse, Wayne, Nebraska:
Just a word on my Double Canadian Petunia planted in early December. They germinated $100 \%$ for Mother's Day. Had 1200 in 5 -inch pots that were superb. Fifteen to twenty large blooms on each, many of the blooms were $4^{1 / 2}$ to 5 inches across. I have never seen the equal to them, not even in pictures in the seed catalogs. Needless to say, I made some profit on same.
Wakelee Greenhouse, Waterbury, Connecticut:
Out of last year's trade packet of Canadian All-Double Petunias, I sold 2254 -inch plants at $\$ 1.00$. Plants were excellent and grew very stocky.
Mr. Arvid H. Johnson, Cassadaga, New York:
I got in December 1 1/28 ounce Ball's All-Double Petunias and had 1600 plants out of them. We thought that good.

## 7. Aybrid Grandiflara Petunias

## Greater Uniformity

## A new era has arrived for Petunia $F_{1}$ Hybrids. What are they?

$\mathrm{F}_{1}$ Hybrid Petunia seed (like Hybrid Snaps and Hybrid Corn) is seed saved from an artificial cross of two specially selected parents-both impart special qualities to the cross and together produce an amazing degree of vigor known as heterosis.

## What are their advantages?

- Greater uniformity. No substantial variation in color or habit of plants.
- Greater vigor. Fast, strong growth is greatest single advantage of $\mathrm{F}_{1}$ Hybrids. More plant-more blooms.
- New colors are possible from special parent combinations. Considering the low percentage of seed cost to your total receipts for bedding plants, you can afford


## Crusader

(2I) Hybild 11 in . Gaily striped,
extra bright rose-pink on pure white. The liveliest, most attractive bicolor we've offered. Grown in shade the color balance will go to the dark side. Adverse cultural conditions seem to cause them to become lighter, but restoration of normal cultural conditions restores normal color.
$1 / 2$ tr. pkt., \$1.75; tr. pkt., \$3.00; 1128 oz., \$5.50; $1 / 64$ oz., \$10.00; 1/32 oz., \$19.00.

## Ask the Man Who Grows Them!

Mr. Art Thomas, Thomas Flower Mart, Syosset, N. Y.: My biggest hit was undoubtedly your Crusader Petunia. I must have grown 250 flats of that one. I never had enough. I kept some samples in bloom and the people went crazy over it. I find that it is about the best grower of any variety I grow also, either in the greenhouse or in the garden. I sold them for $\$ 5.00$ a flat or 85 c a dozen, and I'm darned sure I won't lose any customers with that one.
only the best. Sturdier, larger, more vigorous plants, greater uniformity, plus unique new colors combine to make an unbeatable combination to offer your customers.

## Multifloras vs. Grandifloras?

Grandifloras are extra large flowered, ruffled and fringed, with medium dwarf habit. Multifloras produce medium sized, plain-edged flowers, generally somewhat more erect in growth, limiting their usefulness in pots. Ideal for flat sales and bedding use. Both have their place, but the Grandifloras are equally salable as flatted plants, out of pots or for combinations. They represent the "real quality" in modern Petunias. Multifloras are somewhat more colorful"showier" in mass plantings.

- Bolero. [(F)Hrarid 11 in . Compact, medium rose fringed. We were quite disappointed in the appearance of Bolero in our trials last summer. Variable and not as vigorous as most hybrids. Prefer and recommend Prima Donna instead.
 purest white with yellow throat and remarkable vigor are the outstanding points about this fine Hybrid Petunia. We consider La Paloma the finest fringed white bedding variety available today.
- Tango. [5) Hreride (Photo below.) 10 in . A bushy plant with luxurious deep green foliage against which the large, bright salmon-scarlet flowers literally stand out like flares. Flowers are moderately fringed and ruffled, and are freely produced. Makes a fine pot plant and is equally good for bedding. Most popular $\mathrm{F}_{1}$ Hybrid Grandiflora.
- Flirt. (New.) [fif mrantos Medium sized, clear bright pink flowers are freely produced on vigorous but fairly compact plants. An entirely new color in Hybrid Petunias, and one that should prove to be quite popular.
Prices above 4 , each: $1 / 2$ tr. pkt., $\$ \mathbf{1 . 3 5}$; tr. pkt., $\$ \mathbf{2 . 5 0}$; 1/128 oz., \$4.50; $1 / 64$ oz., $\$ 8.00$; $1 / 32$ oz., $\$ 15.50 ; 1 / 16$ oz., $\$ 29.00$.

CRUSADER


TANGO



PRIMA DONNA


BALLERINA

## 71 Hybrid Grandiflaras _ Continued

## - PRIMA DONNA

(New.) [EHYBRID] LHAHERIG: NHECTION Large, heavily ruffled bright rose flowers with darker veins on vigorous, spreading, base-branching plants. Quite similar to the popular Ballerina except for color, and promises to be equally valuable.
Prices above 2, each: $1 / 2$ tr. pkt., $\$ 1.35$; tr. pkt., $\$ 2.50$; 1/2s oz., $\$ 4.50 ; 1 / 64$ oz., $\$ 8.00 ; 1 / 3 \geq$ oz., $\$ 15.50 ; 1 / 1 ; 0 z ., \$ 29.00$.

## 7. Hybrid Multiflaras

## NEW INDIAN SERIES

The Indian Series is offered to help you to sell these free flowering, vigorous Multifloras as a group or series. They have similar height and plant shape, plant well together, bloom the same time. Let one Indian help sell another. Use Comanche to kick off the tribal procession!

See Next Page for Other $\mathrm{F}_{1}$ Hybrid Aultifloras
 right.) 13 in . A brilliant scarlet-crimson, deeper and more intense than Fire Chief, and with larger flowers produced in great abundance on vigorous, fast growing plants. This is the finest red bedding Petunia we have ever seen. A "must" on your list!

- Apache. (New.) ECHManios 11 in . An intense deep ceriserose similar in color to Lipstick but much more vigorous and productive.
© Paleface. (New.) E(E)ArBRtD 10 in . Without question the most vigorous and extremely free flowering white bedding Petunia in existence, and one of the most noteworthy in our outdoor trials last season. Pure white flowers with small creamy eye.
- Sioux. (New.) Ingranid 11 in. A deep, intense salman shading toward red at throat. Midway between Linda and Comanche in color. Very vigorous and blooms profusely.
Prices above 4, each: $1 / 2$ tr. pkt., $\$ 1.00$; tr. pkt., \$1.75; 1,128 oz., $\$ 3.50$; $1 / 64$ oz., $\$ 6.50$; 1/32 oz., $\$ 11.70 ; 1 / 16 \mathrm{oz}$., $\$ 20.00$.



LINDA


PINK SENSATION

PALEFACE


8

## 7. Hybrid Mnltiflaras

## Continued

- Silver Medal. [fis) hrbrid allemera shetion 11 in . Medium large flowers of soft salmon-pink are lavishly produced on free-branching, semi-upright type plants. Here is an ideal shade for the trade which likes soft pastel colors.
 orous, free flowering, fast growing "showy" Petunias we have ever seen. This color is near Fair Lady-a light silvery pink. A very useful Petunia for bedding where a real show of color is wanted.
- Rose Charm. [(f)embrios (Pictured above.) 12 in. Rich, brilliant rose, wonderfully vigorous, free branching and flowering. In our trials each plant reaches a spread of over 2 feet and is literally a solid mass of bloom. Rose Charm has an ideal "bedding" habit of growth. Somewhat procumbent in habit as compared with most Petunias, it forms a sort of "mat" or carpet of bloom in which one plant joins to its neighbor. A real "floral ground cover!"
- Linda. [flarranios (New-upper left.) 9 in. Brilliant rosy salmon flowers similar to Silver Medal are carried on bushy, solid plants of great vigor. Will withstand heavy wind and rain without plants breaking down. Somewhat more dwarf than Silver Medal. We find demand for salmon Multiflora Petunias gradually shifting to this variety from Silver Medal.
- Brilliancy. (New.) [ffrentos Quite similar to Apache in its deep cerise-rose coloring but taller and more vigorous in growth. Makes a wonderful show for bedding.

Prices above 5, each: $1 / 2$ tr. pkt., $\$ 1.00$; tr. pkt., $\$ 1.75$; $1 / 128$ oz., $\$ 3.50 ; 1 / 64$ oz., $\$ 6.50$; 1/32 oz., $\$ 11.70 ; 1 / 16$ oz., $\$ 20.00$.

## $F_{1}$ Hybrid (Paleface) Vigor-There Really IS a Difference!

Here are the well known Snowball Imp. and Paleface Petunias planted side by side from same sowing date in our 1954 trials. See page 7 for Paleface and other Indian Series Multifloras.

## Califarnia Giant Petunias

$285,000 \mathrm{~S}$. Equally at home as pot plants, in combinations of all sorts, and planted out in beds, California Giant Petunias never fail to draw the interest of Petunia buyers. Our finest strain, for early blooming and dwarf habit with extra large flowers, is Ball Dwarf Giant No. 1. Our other listings are mast suitable for bedding, and are $0 . \mathrm{K}$. for combinations if a little extra height is desirable.
Sow December 15 for heavy 3-inch for Mothers Day combinations and plant sales. January 10 sowing will make blooming 3 -inch for late May sales.

## - Ball Dwarf Giant No. 1-For Pots

(See illustration.) This is the finest Giant Petunia for spring sales flatted or in pots and combination pots or boxes because:

- It is earliest blooming-will throw one large bloom very early in the growth of the plant-this makes it sell on sight.
- It is dwarf and compact in habit throughout the season. Does not become "leggy."
- Has largest flowers with delicately netted open throats. The superiority of this strain over other Giant Petunias is maintained by yearly greenhouse selections and trialing at West Chicago. Over $90 \%$ large flowers, full range of Dwarf Giant colors and shades.
Three Separate Colors from this mixture are also available. Some growers buy these colors separately and mix according to their own requirements.


## Orchid Rose-Red Rose and White

Prices above 4, each: $1 / 2$ tr. pkt., \$1.00; tr. pkt., \$1.75; $1 / 64$ oz., \$2.75; $1 / 32$ oz., \$5.00; $1 / 16$ oz., \$9.50.

- Ball Dwarf Giant No. 2-For Bedding. Some growers prefer this strain for bedding use because it is somewhat more vigorous in growth and includes some pink and copper shades which it is impossible to breed into the extra dwarf, early blooming No. 1. Taller and somewhat later blooming than No. 1.
Ramona. Large, open throated flowers about half rose, balance pink and lavender. $95 \%$ large flowered. Bred especially for pots and combinations.
Prices above 2, each: $1 / 2$ tr. pkt., $\$ 1.00$; tr. pkt., $\$ 1.75$; $1 / 64 \mathrm{oz}$, \$2.75; 1/32 oz., \$5.00; 1/16 oz., \$9.50.
California Giants Mixture No. 5. A very complete and attractive mixture of colors in the tall Giant class. Free flowering for bedding.
Tr. pkt., 75c; $1 / 64 \mathrm{oz} ., \$ 1.35$; $1 / 32 \mathrm{oz}$., \$2.50; $1 / 16 \mathrm{oz}$., $\$ 4.50$.
California Giant-Supreme Florists' Strain. Fine bedding mixture in soft shades of pink, rose and salmon.
Tr. pkt., \$1.00; $1 / 64$ oz., $\$ 1.75$; $1 / 32 \mathrm{oz}$., $\$ 3.00 ; 1 / 16 \mathrm{oz} ., \$ 5.50$.
Giant Rainbow Strain. Excellent mixture. 1/2 tr. pkt., 65c;
tr. pkt., \$1.00; 1/64 oz., \$1.85; $1 / 32$ oz., $\$ 3.25$; $1 / 16 \mathrm{oz}$., $\$ 5.75$.


BALL DWARF GIANT No. 1
This popular mixture is also available in three separate colors listed in box at left.

## SEPARATE COLOR VARIETIES

White Giant. Pure white petals with yellow throat. This is a definite improvement on the old Rheingold. Tr. pkt., 75c; 1/64 oz., \$1.35; 1/32 oz., \$2.50.
Copper Red, Dark. Attractive deep coppery crimson. Tr. pkt., \$1.00; $1 / 64 \mathrm{oz}$., $\$ 1.75$; $1 / 32 \mathrm{oz}$., $\$ 3.00$.
Glamour. A beautiful rich salmon-rose, shading lighter toward the throat. Tr. pkt., 85c; ${ }^{1} 64$ oz., $\$ 2.00$; $1 / 32$ oz., $\$ 3.75$.
Irene. Coral-red; white netted throat.
Tr. pkt., 85c; 1/64 oz., \$1.50; $1 / 32$ oz., $\$ 2.50$.


## VIBRA - SEEDER

Many gadgets for hand sowing of seeds have been tried by us. We always come back to the Vibra-Seeder. We have sold hundreds of these battery operated sowing tools. No parts to change, takes all sizes and shapes of seeds with the same easy vibrating action, which assures an even flow of seed and ultimately an even stand of seedlings. Flashlight batteries not included.
Price, $\$ 1.95$ net.

## Ball Grandiflara

## (Large Flowered)

## Petunias

$285,000 \mathrm{~S}$. There are 3 distinct classes of Grandifloras: the Ruffled, the Fringed, and the Dwarf. Like all Petunias, the most vigorous are the tall ones. The Dwarf Grandifloras make ideal pot plants, but for bedding most of them do not hold up where summers are very warm.

## RUFFLED GRANDIFLORAS

- White Queen. 12 in. Extra large, wavy, pure white flowers and vigorous growth make this a truly outstanding Petunia. Fine for bedding or pot plant use.
- Snowstorm. 12 in. Fine, large flowered white. Similar to White Queen. Makes a nice pot plant.
- Elk's Pride Dwarf. 11 in. Our strain of this always popular, rich velvety purple is admirably suited for bedding or porch boxes. Uniform in growth and a ready seller.
Prices above 3 , each:
Tr. pkt., 85c; $1 / 64$ oz., $\$ 1.90$; 1/32 oz., \$3.40; 1/16 oz., \$5.75.
Purple Prince. Large, deep violet-blue flowers on vigorous plants. Outstanding for its rich color and free flowering habit. Tr. pkt., \$1.00; 1/64 oz., \$2.00; 1/32 oz., \$3.75; 1/16 oz., \$7.00.
White Cloud. 11 in . We offer the originator's strain.
Burgundy. 12 in. Dark burgundy wine-red with large white throat.
Dwarf Pink Glory, 10 in . Glowing carmine-rose with white throat. Our stock of this fine variety has recently been improved. The small flowered types formerly prevalent have been almost entirely eliminated.
Giant Flaming Velver. 10 in . The finest velvety mahogany-red on our Petunia list. Larger flowered than King Henry or Velvet Ball, it produces a very striking effect.
Royalty. 12 in . Large ruffled flowers in combinations of purple and white.
Prices above 5, each:
Tr. pkt., 85c; $1 / 64$ oz., $\$ 1.90 ; 1 / 32$ oz., $\$ 3.40 ; 116$ oz., $\$ 5.75$.
- Ruffled Grandiflora Mixture. A well balanced formula mixture of above varieties in following proportions: $25 \%$ White; $25 \%$ Pink; $25 \%$ purple; $12 \frac{1}{2} \%$ Mahogany-Red; $121 \frac{1}{2} \%$ Wine-Red. Tr. pkt., 60c; 1/64 oz., \$1.50; $1 / 32$ oz., $\$ 2.75$; $1 / 16$ oz., $\$ 5.00$.

Summer Night. 10 in. Elk's Pride color but much more bushy and compact than the variety Elk's Pride. Blooms with doubles. Tr. pkt., $\$ 1.00 ; 1 / 64 \mathrm{oz} ., \$ 2.25$; $1 / 32 \mathrm{oz}$., $\$ 4.00$; $1 / 16 \mathrm{oz}$., $\$ 7.50$.


1954 FIELD DAY AT BALL'S. NOTE PALEFACE PETUNIA CENTER FRONT!
Petunias are the feature of the special "window dressing" planting in the foreground as well as the comparative trial rows in the general trial area. Some 600 individual trials of annuals may be viewed in our trial grounds any time during July and August, but you are especially invited to come during our Field Day late in July. Watch for announcement of the date.

## Deuarf Grandiflora Petunias

## Retain That Neatly Tailored Look

A general objection to Petunias for yard planting is the "straggly" look they get in mid-late summer. For the ultimate in dwarf, neat restricted growth habit, use these outstanding varieties. They have two principal advantages to florists.

1. They bloom very early in pots or flats.
2. They retain the dwarf, compact habit of growth throughout the year.
Part of our Petunia breeding work in recent years has been aimed at developing more satisfactory varieties in this class. Robin is an outstanding example.

## POT PLANT TYPES

The past several years' breeding work has yielded several new Petunia varieties which seem admirably adapted to pot plant growth, but are not so universally useful for outdoor planting. Outdoors in an ideal environment these varieties will be quite attractive; but where conditions are not ideal they will appear somewhat inferior to their stronger growing brothers, such as $\mathrm{F}_{1}$ Hybrids, Doubles, California Giants, Ruffled Grandifloras, etc. So we have taken the liberty of listing the following varieties separately to indicate a special adaptability to growth in pots in the greenhouse in spring. Many of the Petunias listed on the preceding 7 pages also make ideal pot plants. Check variety descriptions for our recommendations

- Carosel. Try this unique lovely bright purple and white variegated Dwarf Fringed Grandiflora which attracted much favorable interest in our trials last year. It has gained in popularity steadily since its introduction two years ago.
$1 / 2$ tr. pkt., $\$ 1.00$; tr. pkt., $\$ 1.75$; $1 / 64 \mathrm{oz} ., \$ 3.30 ; 1 / 32 \mathrm{oz}$., \$6.00; 116 oz., \$11.00.
Colorado Sunset. Medium to light rose-pink; fringed. Extra dwarf and restricted; a nice pot plant subject. Uniform and free flowering.
$1 / 2$ tr. pkt., 85c; tr. pkt., \$1.50; 1/64 oz., \$3.50; 1/32 oz., \$6.00.
- Lace Veil. Fringed, pure white flowers. Our present stock of Lace Veil is much more uniform and free flowering than two years ago. Habit similar to Setting Sun.
Tr. pkt., 85c; 1/84 oz., \$2.00; 1/32 oz., \$3.50.

- Little Giants Mixed. 8 in. Small, ruffled California Giant type flowers are freely produced on low growing, uniform plants. Ideal for pots and combination work as well as bedding. Colors range from amaranth-red through rose and pink to white. Tr. pkt., 75c; $1 / 64 \mathrm{oz}$, , $\$ 1.50$; $1 / 32 \mathrm{oz} ., \$ 2.75$; 1416 oz . $\$ 5.00$. Little Giants, Pink Shades. 8 in . Same habit as little Giants Mixed but in various shades of pink.
Tr. pkt., $\$ 1.00 ; 1 / 64$ oz., $\$ 1.75 ; 1 / 32$ oz., $\$ 3.00 ; 116$ oz., $\$ 5.50$. Martha Washington. 8 in. Ruffled lavender-pink flowers; veined throat. Tr. pkt., 75c; $1 / 64$ oz., $\$ 2.75$; $1 / 32 \mathrm{oz}$., $\$ 5.00$.

Popular for sale both as decorated 4- or 5 -inch pot plants and for garden use are these Dwarf Grandifloras of fered on this page, typified by the variety illus trated, Robin.

- Robin. (New.) Bred especially for use in pots or for combinations, but equally at home as a border plant. Plants are dwarf and compact, carrying their medium sized, ruffled flowers of rich, bright rose with white throats well above the foliage. $1 / 2$ tr. pkt., 85 c ; tr. pkt., $\$ 1.50$; $1 / 64 \mathrm{oz} ., \$ 3.50$; $1 / 32$ oz., $\$ 6.00$ Ball Fringed Violet-Blue. Deep violet-blue on compact, bushy plants. Tr. pkt., 75c; $1 / 64$ oz., $\$ 1.65$; $1 / 22 \mathrm{oz} ., \$ 3.00$.
Salmonet. Nicely fringed flowers of luminous, clear salmon are borne profusely on dwarf plants. Salmonet is the earliest blooming Petunia on our entire list. Valuable for combinations as well as bedding plant sales.
$1 / 2$ tr. pkt., 85c; tr. pkt., \$1.50; $1 / 64$ oz., $\$ 3.50 ; 1 / 32 \mathrm{oz} ., \$ 6.00$. Setting Sun. Fringed deep rose; rather uneven growth. We are not satisfied with our present stock of this variety. Until it is improved, suggest either Bolero or Prima Donna.
Tr. pkt., 85c; 1/64 oz., \$2.00; 1/32 oz., \$3.50.
- Dwarf Erfurt Mixture. A formula mixture of Dwarf fringed varieties, including those mentioned in the pot plant type listed above. Tr. pkt., 85c; 1/64 oz., \$2.00; 1/32 oz., \$3.50.


## OTHER DWARF GRANDIFLORAS

- Carmencita. 8 in. Makes a nice pot plant. Medium size. Well fringed, bright salmon-red flowers on dwarf, compact plants. $1 / 2$ tr. pkt., 85c; tr. pkt., \$1.50; 1/84 oz., \$3.50; 1/32 oz., \$6.00.
- Rosita. 10 in. Large, heavily ruffled and fringed flowers of bright rose-pink with netted throats are carried erectly on compact plants. An outstanding pot plant Petunia.
$1 / 2$ tr. pkt., 85c; tr. pkt., \$1.50; 1/64 oz., \$3.50; $1 / 32$ oz., \$6.00.
TALL HYBRIDAS
Taller and stronger growers than the Dwarf class. Well suited for bedding, especially where heat and drought prevail.

General Dodds. Deep amaranth-red.
Topaz Rose. Brilliant deep rose; about same color as Topaz Queen.
Exquisite Mixture. Formula mixture; fine large-flowered varieties predominating.
Prices above 3, each: tr. pkt., 40c; $1 / 4$ oz., $\$ 1.20$; 1 oz., $\$ 3.60$. Howard's Star Imp. Medium tall, velvety crimson with large white star in each flower. Our strain comes quite true to the starred type. Tr. pkt., 75c; $1 / 4 \mathrm{oz} ., \$ 1.50 ; 1$ oz., $\$ 5.50$.

## THE BALCONIES

The growth of Balconies is strong and tends to lengthen, making them suitable for window boxes, combinations or bedding.

Black Prince. Deep velvety crimson-red. Royal Rose
Prices above 2, each: tr. pkt., 40c; $1 / 16 \mathrm{oz}, 65 \mathrm{c}$; $1 / 8 \mathrm{oz} ., \$ 1.15$; 1/4 oz., \$2.00; 1 oz., \$6.75.
 l oz., \$4.75.

## Fringed Grandiflaras

Dainty Lady. A light cream. The nearest approach to a yellow Petunia. Tr. pkt., \$1.00; 1/64 oz., \$2.35; 1/32 oz., \$3.75.
Dazzler. 9 in. Free flowering, deep carmine-rose; fairly well fringed and very showy. Extra early and dwarf. This is a fine pot plant variety.
Tr. pkt., 60c; 1/64 oz., \$1.50; 1/32 oz., \$2.75.
Fluffy Ruffles. An attractive fringed mixture for bedding work. Tr. pkt., 50c; 1/32 oz., \$1.75; 1/16 oz., \$3.00; 1/8 oz., \$5.50.

- Fringed Snowstorm. 15 in . Nicely fringed, pure white flowers with faint gold throat are very freely produced. One of the finest for either pots or bedding. $1 / 2$ tr. pkt., 65 c; tr. pkt., $\$ 1.00$; 1/64 oz., \$2.35; 1/32 oz, \$3.75; 1/16 oz., \$6.75.
Light Blue. Campanula-blue, with dark veins and purple throat. Nicely fringed.
Pink Triumph. Choice clear rose-pink. Fine bedder.
Royal Purple. Velvety purple with attractively fringed petals.
- Theodosia Improved. 12 in. Extra large, heavily fringed flowers of brilliant glowing rose with contrasting golden yellow throat.
White Beauty. A strong grower; fringed pure white.
Prices above 5, each: tr. pkt., 60c; $1 / 64$ oz., $\$ 1.50 ; 1 / 32$ oz., $\$ 2.75$.
Gaiety. 12 in . Medium sized, fringed flowers irregularly marked rose-pink and white. Vigorous in growth but dwarf and spreading in habit. Tr. pkt., 75c; 1/64 oz, \$1.75; $1 / 32$ oz., $\$ 3.00$.
White Mound. 15 in. Uniform, compact growth with medium sized, white flowers.
Tr. pkt., 75c; 1/64 oz., \$1.75; 1/32 oz., \$3.00.
- Fringed Grandiflora Mixture. A high class mixture made up of the best named varieties in the Fringed class. Tr. pkt., 50c; 1/32 oz., \$1.85; 1/16 oz., \$3.50.


FRINGED SNOWSTORM

## Dwarf Hubridas

## FOR BEDDING

## The 10 Best Dwarf Hybridas are Indicated by Dots

$285,000 \mathrm{~S}$. Each year on the basis of reports from customers, as well as from our own flowering trial reports, we revise our recommended list of 10 best varieties. It should be noted that this list does not include five of the finest bedding types listed on page 5we have placed these varieties in a "class by themselves."


CELESTIAL ROSE IMP. (See next page
-ADMIRAL
10 in . This is our finest and most popular blue Petunia. Large, attractively ruffled flowers; clear bright velvety blue. Ideal for either pots or bedding. Tr. pkt., 80c; $1 / 64$ oz., \$1.65; 1/32 oz., \$2.90; 116 oz., \$5.25; 1/8 oz., \$9.50.

Alderman. Fairly uniform growth with medium small, lavenderblue flowers. Tr. pkt., 40c; 1/4 oz., \$1.35; 1 oz., \$4.25.
Blue Bird. Similar to Alderman; growth a bit more vigorous. Tr. pkt., 40c; $1 / 4$ oz., \$1.35; l oz., \$4.25.
Blue Bedder. Vigorous growth, large flowers, less lavender shading and more blue than above two.
Tr. pkt., 40c; $1 / 4$ oz., $\$ 1.35$; 1 oz., $\$ 4.25$.
Bright Eyes. 10 in. Uniform and dwarf. Medium sized rosepink with white throat. Striking!
Tr. pkt., 50c; $1 / 8$ oz., $\$ 1.25$; $1 / 4 \mathrm{oz}$, $\$ 2.25$; 1 oz., $\$ 6.50$.

## REGARDING PETUNIA "FORMULA MIXTURES"

Since germination, vigor, and reaction to different climatic conditions vary with varieties, it is difficult to make a formula mixture which will perform with uniform satisfaction everywhere. Some varieties are naturally more vigorous, while others tend to be "drowned out" by the stronger growers; and the resultant color balance is not always entirely satisfactory. For this reason, where you need substantial quantities, we recommend that you buy separate colors, mixing the seedlings when transplanting to get special color combinations.

## Duatz Zybucatas cate

- Celestial Rose Improved. 10 in. Deeper rose coloring and slightly larger flowers than the original stock. Unexcelled for pot plant work or bedding. Our strain has been unsurpassed in the florist trade for over a decade.
Tr. pkt., 60c; 1/8 oz., \$1.15; 1/4 oz., \$2.00; 1 oz., \$6.50.
- Cheerful. 11 in. Medium large, star-shaped flowers of clear salmon are freely produced on uniform, fairly dwarf plants Tr. pkt., 75c; $1 / 16$ oz., \$2.00; 1/8 ©z., \$3.75; $1 / 4 \mathrm{oz} ., \$ 6.00$. Cockatoo. Irregularly marked purple and white.
Tr. pkt., 75c; 1/32 oz., \$1.50; $1 / 16$ oz., \$2.75; $1 / 8$ oz., \$5.75. Cream Star. 11 in. Star-shaped, creamy white.
Tr. pkt., 50c; $1 / 8$ oz., \$1.25; $1 / 40 \mathrm{oz}$ 。 $\$ 2.25$.
- Elk's Star. 10 in . Deep velvety crimson with white star. Tr. pkt., 50c; $1 / 16$ oz., $\$ 1.25$; $1 / 8$ oz., $\$ 2.20$; $1 / 4$ oz., $\$ 4.00$. English Violet. A pleasing shade of rosy violet-mauve. Tr. pkt., 75c; 1/8 oz., \$1.50; 1/4 oz., \$2.75; 1 oz., \$8.00. Fair Lady. Light pink. For flat sales and bedding we recom. mend Pink Sensation which is more vigorous and uniform. Tr. pkt., 60c; 1/16 oz., \$1.40; 1/8 oz., \$2.50; 1/4 oz., \$4.25.
- Fire Chief. MIFMERICA SELIECION 11 in . Newly opened flowers are a true scarlet-red, turning to deep salmon-rose with age.
Tr. pkt., 50c; $1 / 16$ oz., $\$ 1.65 ; 1 / 8$ oz., $\$ 2.90 ; 1 / 4 \mathrm{oz} ., \$ 5.00$.
- Glow. 10 in . Bright rose-red flowers are produced in abundance on dense growing, vigorous plants of uniform habit. Tr. pkt., 50c; 1116 oz., \$1.25; $1 / 8$ oz., \$2.00; $1 / 4 \mathrm{oz} ., \$ 3.75$; 1 oz., \$13.50.
- Heavenly Blue. 13 in. An old favorite, and rightly so. Still the best silvery blue in this class. This medium to light blue shade combines beautifully with other bedding subjects.
Tr. pkt., 50c; 1/8 oz., \$1.00; $1 / 4 \mathrm{oz} ., \$ 1.75 ; 1$ oz., $\$ 6.00$. Igloo. 9 in. White. Extra dwarf, well shaped plant. Clean, bushy habit.
Tr. pkt., 60c; $1 / 8$ oz., \$1.15; $1 / 4$ oz., \$2.00; 1 oz., \$6.50.
King Henry. 10 in. Deep velvety crimson or mahogany-red. Compact growth makes this a choice pot plant variety. Tr. pkt., 75c; $1 / 32$ oz., $\$ 1.50 ; 1 / 16 \mathrm{oz} ., \$ 2.75$; $1 / 8$ oz., $\$ 5.25$; $1 / 4 \mathrm{oz} ., \$ 10.00$.
Lipstick. 10 in. Bright cerise-rose (near Glow) flowers faintly shaded salmon, with white throat, are carried on fairly dwarf plants of uniform size.
Tr. pkt., 50c; $1 / 16$ oz., \$1.65; $1 / 8 \mathrm{oz} ., \$ 2.90 ; 1 / 4 \mathrm{oz}$, $\$ 5.00$.
Norma. Lavender with white star; dwarf and compact.
Tr. pkt., 40c; 1/8 oz., \$1.40; 1/4 oz., \$2.50.
Peach Red. 15 in. Free flowering, rich salmon-rose. Tr. pkt., 50c; $1 / 16 \mathrm{oz} ., \$ 1.00 ; 1 / 8 \mathrm{oz} ., \$ 1.80 ; 1 / 4 \mathrm{oz} ., \$ 3.25$.


ELK'S STAR


SNOWBALL IMP.
Rose of Heaven. 8 in. Well known rose-pink for bedding. Tr. pkt., 40c; 1/4 oz., \$1.15; $1 \mathrm{oz} ., \$ 3.40$. Rosy Morn. 10 in. Popular rose-pink with large white throat. Tr. pkt., 50c; $1 / 4 \mathrm{oz} ., \$ 1.50$; $1 \mathrm{oz} ., \$ 5.25$.
Salmon Supreme. 14 in . Clear salmon-pink flowers.
Tr. pkt., 50c; 1/32 oz., \$1.50; $1 / 16$ oz., \$2.75.
Snow Queen. 14 in. Pure white. Free flowering habit.
Tr. pkt., 50c; 1/8 oz., \$1.00; 1/4 oz., \$1.75; 1 oz., \$6.00.

- Snowball Imp. 8 in. Pure white. Compact and uniform, yet vigorous. Tr. pkt., 50c; $1 / 4 \mathrm{oz} ., \$ 1.80 ; 1 \mathrm{oz}$, , $\$ 5.40$.
- Topaz Queen. 10 in . A remarkable color combination of glowing carmine-rose with distinct orange-scarlet overtone. Medium large flowered and striking for both bedding and pots. Tr. pkt., 50c; $1 / 8$ oz., $\$ 1.00 ; 1 / 4$ oz., $\$ 1.75$; 1 oz., $\$ 6.00$.
Twinkles. 8 in. Very showy, rose-pink with white star. Uniform growth and markings.
Tr. pkt., 50c; $1 / 4$ oz., \$1.75; 1 oz., \$6.00.
- Velvet Ball. 10 in. Dark red; almost identical to King Henry in color but more spreading in growth and better adapted for bedding use. Tr. pkt., 75c; $1 / 32$ oz., $\$ 1.50$; $1 / 16$ oz., $\$ 2.75$; $1 / 8$ oz., $\$ 5.25$; $1 / 4$ oz., $\$ 10.00$.
Violacea. 15 in . Deep purple. Tr. pkt., 40c; $1 / 4$ oz., \$1.40. Violet Blue. GEM TYPE. Deep violet-purple. Fine for pot plants or combination boxes.
Tr. pkt., 40c; $1 / 8$ oz., 80c; $1 / 4$ oz., \$1.45; 1 oz., \$4.75.
White Perfection. 13 in . An excellent, compact, pure white. Tr. pkt., 50c; $1 / 4 \mathrm{oz} ., \$ 1.50 ; 1$ oz., \$4.50.


## - BEST FORMULA MIXTURE

We mix this ourselves, blending the best contrasting colors in proportions pleasing to the eye. Fine for spring flat sales. Tr. pkt., 50c; $1 / 16 \mathrm{oz} ., \$ 1.00 ; 1 / 8 \mathrm{oz} ., \$ 1.85 ; 1 / 4 \mathrm{oz} ., \$ 3.50$; $1 \mathrm{oz} ., \$ 10.00$.

Dwarf Hybrida Mixture. A careful blend of the above varieties. Tr. pkt., 50c; $1 / 4 \mathrm{oz}$., $\$ 1.50 ; 1 \mathrm{oz}$., $\$ 4.50$.
Dwarf Hybrida Starred Mixture. Nice mixture of starred types. Tr. pkt., 75c; 1/4 oz., \$3.00; 1 oz., \$9.00.

- Gleam Mixed. (New.) A formula blend of five colors in the Hybrida or bedding class which have been specially developed to be of uniform size and habit for better conformity in mixtures. Contains red, rose, mid-blue, dark blue and ivory-yellow. Tr. pkt., \$1.00; $1 / 32$ oz., $\$ 2.75$; $1 / 16 \mathrm{oz} .$, \$5.00; $1 / 8 \mathrm{oz} .$, \$9.00; 1/4 oz., \$16.50.
COLLECTION. For growers who are interested in trying all the 10 Best Varieties separately rather than in a mixture, we offer a tr. pkt. of each for $\$ 5.30$.


## Papular Annuals

## For Bedding and Cutting

On this and the following pages through page 58 we have grouped, in alphabetical order, all our valuable bedding and cut flower annuals except Petunias on foregoing pages. Perennials will be found starting page 59. In selecting these varieties, we keep constantly in mind the interest of the professional or commercial grower, the fellow whose very living depends on top-most quality.

To better enable you to judge the amount of seed you'll need for your planting requirements we have indicated the number of seeds per ounce of all important items listed. For example: ACRO-CLINIUM-8500 S means 8500 seeds per oz. These figures must NOT be accepted as indicating the number of plants to be expected. Under favorable germinating conditions most large seeds will germinate 60 to 70 percent.
The dot ( ) indicates varieties most dependably satisfactory in our experience and observation.

## ABUTILON (Flowering Maple)

Giant Flowered Mixed. $10,000 \mathrm{~S} .3 \mathrm{ft}$. Extra large and early flowering. Ornamental leaves. Tr. pkt., 40c; $1 / 8 \mathrm{oz} ., \$ 1.25$.

## ACHIMENES

Mixed Colors. $2,000,000$ S. Brilliantly colored, trumpet-like flowers in velvety tones of red, violet and white. Makes a nice spring and summer pot plant. Culture like Gloxinias.
Tr. pkt., \$1.50.

## ACROCLINIUM

Sensation Gionts. 8500 S. An extra large semi-double strain of brightly colored Strawflowers for cutting. Shades of rose, pink and white. Tr. pkt., 20c; $1 / 4$ oz., 35c; 1 oz., $\$ 1.00$.

## AGATHAEA

Coelestis (Blue Daisy). $27,000 \mathrm{~S}$. Fairly tall ( 2 ft .) and useful for cutting. Of slow germination.
Tr. pkt., 30c; $1 / 4$ oz., 90c; 1 oz., \$2.70.


ALOE VARIEGATA

## ALOE

Variegata (Tiger Aloe). 6500 S. 2-inch pot plants of this attractive green and yellow tigered succulent can be produced in less than a year. A valuable item for florists.
100 seeds, $\$ 1.65 ; 500$ seeds, \$7.00; 1000 seeds, $\$ 12.00$.

Ferox (African Wart Aloe). 9400 S . A fast growing succulent that will produce small salable plants in 6 to 8 months from sowing. Much faster growing than Aloe Variegata.
100 seeds, 55c; 250 seeds, \$1.10; 500 seeds, \$1.90; 1000 seeds, $\$ 3.25$.


AGERATUM
MEXICANUM. $200,000 \mathrm{~S}$. Most seed-produced strains vary somewhat in habit but make satisfactory material for flat sales.

- Blue Bedder. Fairly uniform in growth and color with medium large, freely produced, bright blue flowers. 12 in . Tr. pkt., 40c; $1 / 8$ oz., $90 \mathrm{c} ; 1 / 4 \mathrm{oz} ., \$ 1.60$; $1 \mathrm{oz} ., \$ 5.00$.
- Blue Cap. Small, bright orchid-blue flowers freely produced on uniform bushy plants. The most dwarf and uniform blue Ageratum. 10 in.
Tr. pkt., 40c; 1/4 oz., \$1.20; 1 oz., \$3.60.
Midget Blue. Medium sized, clear blue flowers are freely carried on dense, small-leaved plants. 12 in.
Tr. pkt., 40c; $1 / 8$ oz., $\$ 1.00 ; 1 / 4 \mathrm{oz} ., \$ 1.75 ; 1 \mathrm{oz} ., \$ 6.00$.
Blue Ball Improved. 12 to 14 in . Large flowered, medium blue. Tr. pkt., 35c; 1/8 oz., 70c; $1 / 4 \mathrm{oz} ., \$ 1.30$; 1 oz ., $\$ 4.25$.
Blue Perfection. 15 to 18 in. Fairly light blue.
Tr. pkt., 25c; $1 / 4 \mathrm{oz} ., 50 \mathrm{c}$; 1 oz., $\$ 1.65$.
Tall Blue. 24 to 30 in . Medium sized, light blue. Tall strain for cutting. Tr. pkt., 30c; $1 / 4 \mathrm{oz}$., 55 c ; 1 oz., $\$ 1.65$.
Fairy Pink. 12 in. Shades of lavender-pink.
Tr. pkt., 50c; 1/8 oz., \$1.00; 1/4 oz., \$1.85; $1 \mathrm{oz} ., \$ 6.50$.
Imperial Dwarf White. 12 to 15 in . Medium dwarf, creamy white. Tr. pkt., 50c; $1 / 4 \mathrm{oz} ., \$ 1.25 ; 1$ oz., $\$ 4.00$.
Golden Ageratum (Lonas inodora). $128,000 \mathrm{~S}$. Large clusters of Ageratum-like golden yellow flowers are freely produced on 12- to 15 -inch plants. Very colorful for bedding or borders. Tr. pkt., 40c; $1 / 16 \mathrm{oz}$., $80 \mathrm{c} ; 1 / 8 \mathrm{oz}$., $\$ 1.50 ; 1 / 4 \mathrm{oz}$., $\$ 2.75$.


## ALYSSUM

90,000 S. All are delightfully fragrant and do well even in poor soils. Valuable for combinations or bedding where summer temperatures are not extreme.

## - ROYAL CARPET

 produced on plants about four inches high and ten inches across. Makes a nice border plant.
Tr. pkt., 45c; $1 / 4$ oz., $\$ 1.50 ; 1$ oz., $\$ 4.50$.

- Carpet of Snow (Snowcloth). Produces a very dense, flat mass of white flowers, 3 to 4 in . high by 8 to 10 in . across.
Tr. pkt., 20c; $1 / 4 \mathrm{oz} ., 30 \mathrm{c} ; 1 \mathrm{oz}$, 90 c ; 4 ozs., $\$ 2.75$.
Little Gem. 5 in . Dense, rounded heads of white flowers; does not spread. Tr. pkt., 20c; $1 / 4 \mathrm{oz} ., 35 \mathrm{c}$; 1 oz., $\$ 1.00$; 4 ozs., $\$ 3.00$.
Snowdrift (Maritimum Tetraploid). Large, snowy white blooms on uniform, 12 -inch plants. Satisfactory for cutting.
Tr. pkt., 30c; $1 / 40 \mathrm{oz} ., 90 \mathrm{c}$; $1 \mathrm{oz} ., \$ 2.70$.
Violet Queen. 5 in . Bright violet flowers are borne on dwarf, compact plants. Tr. pkt., 25c; 1/4 oz., 50c; 1 oz., \$1.25; 4 ozs., $\$ 4.25$.
Perennial Alyssum. See page 59.


## ANCHUSA



ALYSSUM ROYAL CARPET

Blue Bird (Capensis). 1100 S . Attractive, small, deep blue flowers. 18 to 24 in .
Tr. pkt., 30c; $1 / 4 \mathrm{oz}$., 60c; 1 oz., $\$ 1.80$.
Perennial Anchusa. See page 59.

## AMARANTHUS

## 28,000 S.

Molten Fire. 4 ft . Attractively variegated deep red foliage. Plants do best when not transplanted and prefer dry, sunny locations. Tr. pkt., 25c; $1 / 4$ oz., 70c; 1 oz., $\$ 2.10$.
Tricolor Splendens. $60,000 \mathrm{~S}^{2} .3 \mathrm{ft}$. Beautiful foliage. Green. red and yellow. Handle like Coleus.
Tr. pkt., 25c; $1 / 4 \mathrm{oz}$. 40c; 1 oz ., \$1.20.
Crimson Pygmy. 8 in . For combinations.
Tr. pkt., 25c; $1 / 4 \mathrm{oz}$., 40c; 1 oz., $\$ 1.20$.

## ARCTOTIS

Breviscapa Aurantiaca. 7700 S. 6 in. Single orange flowers with dark centers.
Tr. pkt., 75c; $1 / 4 \mathrm{oz} ., \$ 2.00$; $1 \mathrm{oz} ., \$ 6.00$.
Grandis. $25,000 \mathrm{~S}$. 24 to 30 in . Single silvery white flowers with dark blue center.
Tr. pkt., 30c; $1 / 4$ oz., 70c; 1 oz., $\$ 2.10$.
Large Flowered Hybrids 3700 S. 12 in. Gerbera-like flowers
in many beautiful colors.
Tr. pkt., 50c; $1 / 4 \mathrm{oz}$., $\$ 1.50 ; 1 \mathrm{oz}$., $\$ 4.50$.


AGERATUM BLUE CAP

## ASPARAGUS

750 S. We offer seed from a California specialist which germinates around 65 to $75 \%$ in a soil temperature of $70^{\circ}$.

Plumosus Sprengeri
Prices above 2, each: 100 seeds, 30c; 250 seeds, 70c; 1000 seeds, \$2.50; 5000 seeds, $\$ 10.00$.
Perennial Asparagus. See page 60.

## ASTERS

See pages 16-19.
Perennial Asters. See page 60.
Baby's Breath. See Gypsophila, page 32, and Euphorbia Corollata, page 62.
Bachelor Button. See Centaurea Cyanus, page 25.

## BALSAM

DOUBLE BUSH FLOWERING. 3300 S .15 in . Attractive double flowers are carried above the foliage in this bush flowering class rather than being hidden in the leaves.

## Scarlet Rose White Mixture

Prices above 4, each: tr. pkt., 40c; $1 / 4 \mathrm{oz}$., 75c; $1 \mathrm{oz} ., \$ 2.25$.
Double Camellia-Flowered Mixed. 24 in.
Tr. pkt., 15c; 1/4 oz., 30c; 1 oz., \$1.00.

## FOR SHADE

Following subjects enjoy more or less shade. Recommendations of these plants to those of your customers who have a "shade problem" might result in some increased business in these items.

| Alyssum | Coleus | Exacum |
| :--- | :--- | :--- |
| Gloxinias | Impatiens | Lobelia |
| Pansies | Salvia | Torenia |
| Fibrous Begonias | Tuberous Begonias |  |



# Ball Asters 

## (WILT RESISTANT)

## Like to Try a Crop of Money-Making Spring Asters? See page 19

If you think there's no money in Asters, you've probably been growing the ordinary half-single kind with large, open centers. Why not try these new, fully double Ball Strains? We're selling more and more of them to growers everywhere who say they can't afford the cheaper seed. When you stop to consider that 2 dozen more salable flowers out of a trade packet will pay for the extra seed cost, it seems a real waste of labor to grow the ordinary sorts.

Our constant breeding and research which have made these Asters possible are a part of Ball Service-a service which we are continually striving to improve in every way possible.

NOTE: Because of their extreme doubleness these Asters are shy seeders and are sometimes in short supply. Early ordering will help insure your requirements.

## Ask the man who grows them!

Unsolicited comments on Ball Asters.

## Victor H. Davis, Reading, Massachusetts:

Many thanks for your fine work in producing those two remarkable strains of Asters: White Ball and Pink Ball They are the finest Asters I have ever grown.

## Swanson Garden Service, Croton on Hudson, New York:

Ball Asters came through about $90 \%$ wilt-free, long stems, very good in open field.

Philbrick's \& Bailey's Greenhouse, Nashua, New Hampshire: Our Ball Asters, White Ball and Pink Ball, are excellent; stems up to 28 and 30 inches long.


Seed production and flowering trials in our Aster
cloth house at West Chicago.
Phil Jones and Vic Ball looking them over.
Ball
Asters
(WILT RESISTANT)
(12,000 seeds per oz.)

- Azure Ball. Of the same fully double, long-stemmed type as our other Ball Asters, but with slightly smaller flowers ( 3 to $31 / 2$ in.) of clear light blue. Blooms August 20.
- White Ball. Large flowers ( $31 / 2$ to 4 in.). Exceptional doubleness, and fine, stiff stems are the outstanding points about this excellent pure white Aster. Blooms about August 25.
- Pink Ball. Large ( $31 / 2$ to 4 in .), fully double flowers of soft shell-pink carried on long stems. Blooms August 20. Excellent flowered under lights in early spring. This fine strain throws few laterals, so needs very little disbudding.
- Rose Ball. Rich, deep rose with fully double $31 / 2$ - to 4 -inch, incurved flowers which resemble a medium sized Chrysanthemum. Blooms August 25.

Purple Ball. (New.) Large incurved flowers similar to the popular Rose Ball except for its bright purple color. Blooms August 20.

Phlox Ball. (New.) The newest of the Ball Series of Asters with fully double, medium large flowers of soft peachblossom-pink. Blooms September 1.

Ball Florist Mix. A balanced formula blend of all the above extra double Ball type Asters.

Prices above 7, each: tr. pkt., \$1.75; $1 / 4$ oz., $\$ 3.20$; l oz., $\$ 9.60$.
COLLECTION: 1 tr. pkt. each of above 6 named varieties, $\$ 9.50$.

QUEEN OF THE MARKET
Early August-flowering class; rather short-stemmed. Partly resistant. We much prefer the new fully double Ball Strains which can be flowered at this season through additional early lighting. See page 19 for schedules.

- Azure-Blue. A clear, light lavender-blue.
- White. The earliest worth-while cut-flower white.

Ballet Queen. Deep salmon-rose; very resistant.
Dark Blue. Fairly deep shade of purple.
Deep Rose. Of the popular Ball Deep Rose color.
Flesh-Pink. Shell-pink; deepening as it matures.
Crimson. Plant moderately of this heavy color.
Prices above 7, each:
Tr. pkt., 35c; $1 / 4 \mathrm{oz}$, $65 \mathrm{c} ; 1 \mathrm{oz}$., $\$ 2.00$; $4 \mathrm{ozs} ., \$ 7.00$.
Queen of the Market Mixture.
Tr. pkt., 30c; 1/4 oz., 60c; 1 oz., \$1.90; 4 ozs., $\$ 6.50$.

THE ROYALS
Bloom just ahead of the American Branching class.

- Ball White Early. A good resistant white.
- Ball Deep Rose. Long-stemmed, bright deep rose.
- Ball Deep Purple. A rich, deep color; long stems.
- Azure-Blue. A fine commercial cut-flower variety.
- Shell-Pink. A clear shade of pastel pink.

Deep Rose. Slightly taller than other Royals.
Purple. Bright purple; prefer Ball Deep Purple.
White. A good white.
Prices above 8, each:
Tr. pkt., 35c; $1 / 4$ oz., 65c; 1 oz., $\$ 2.00$; 4 ozs., $\$ 7.00$.
Royal Mixture.
Tr. pkt., 30c; $1 / 4 \mathrm{oz} ., 60 \mathrm{c} ; 1 \mathrm{oz}$. $\$ 1.90 ; 4 \mathrm{ozs}$., $\$ 6.50$.
See page 19 for Aster Culture.

Now, for the first time, you can offer all the important Aster colors in the Ball strains.

## Wilt-Resistant Asters_Continued

## AMERICAN BRANCHING

The standard long-stemmed, midseason class, flowering with us in late August.

- Heart of France. Distinctive scarlet-crimson color.

Tr. pkt., 40c; 1/4 oz., \$1.25; 1 oz., \$3.75; 4 ozs., \$12.50.

- Azure-Blue. An excellent, clear light blue.

Ball Phlox-Pink. Light rose, deepening as flowers mature.

- Ball White Late. Popular midseason white.

Deep Rose. Long stems and large flowers.
Peach Blossom. Lavender-pink, paler near center.
Purple. Rich violet-purple. Long-stemmed.
Rosalie. Deep, rich rose.
Semple Pink. Standard shell-pink variety.
White. A good cut flower white; true branching type.
Sensation. Red. A favorite in the South.
Prices above 10, each:
Tr. pkt., 35c; 1/4 oz., 65c; 1 oz., \$2.00; 4 ozs., \$7.00.
American Branching Mixture.
Tr. pkt., 30c; $1 / 4 \mathrm{oz}$, 60c; 1 oz., $\$ 1.90 ; 4 \mathrm{ozs} ., \$ 6.50$.

## PRINCESS ASTERS

These types have crested or cushioned Anemone centers, forming fairly hard, medium sized flowers. Late August.

- Anne. Light peach-blossom-pink.
- Barbara. Very attractive orchid-lavender.

Bonnie. Silvery salmon-rose.

- Elizabeth. Fine pure white.

Golden Sheaf. Discontinued, see Goldilocks.
Goldilocks. Creamy yellow.
Linda. Pure, clear rose.

- Margaret. Long-stemmed, deep rose.

Marsha. Deep reddish crimson.
Susan. Pleasing deep blue.
Virginia. Mid-blue.
Princess Mixture. Formula blend of the above varieties.
Prices above 12, each:
Tr. pkt., 40c; $1 / 4$ oz., 90 c; 1 oz., $\$ 3.00 ; 4$ ozs., $\$ 10.00$.

## SHAGGY TYPES

This includes the Early California Giants and the Cregos. Both have interlaced petals producing a fluffy effect.

Early Giant Light Blue. Extra large and early-blooming with full petaled, shaggy flowers of clear, light blue. Aug. 20-25.
Early Giant Rose Marie. An excellent large flowered, bright deep rose. Aug. 20-25.
Early Giant Peach Blossom. Pleasing light pink. Aug. 20-25.
Early Giant White. Fluffy, pure white flowers.
California Giant Dark Purple. Highly resistant, rich purple. Sept. 25-Oct. 1.
Early Giants Mixed.
Prices above 6, each:
Tr. pkt., 40c; $1 / 4 \mathrm{oz}$, , \$1.25; 1 oz, , \$3.75; 4 ozs., $\$ 12.50$.

- Crego Azure-Blue. Fine light blue, Sept. 10 to 15.

Crego Blue Flame. Deep bright blue. Sept. 5 to 10.

- Crego Deep Rose. Fine large flowered variety. Sept. 10 to 15.

Crego Orchid. Attractive orchid-lavender. Sept. 5 to 10.
Crego Peach Blossom. Light rose-pink. Sept. 10 to 15.
Crego Purple. A rich, bright color. Sept. 5 to 10.
Crego Shell-Pink. Light clear pink. Sept. 10 to 15.

- Crego White. Excellent pure white. Sept. 5 to 10. Prices above 8, each:
Tr. pkt., 35c; $1 / 4$ oz., 65c; 1 oz., \$2.00; 4 ozs., $\$ 7.00$.
Crego Mixture.
Tr. pkt., 30c; $1 / 4$ oz., 60c; 1 oz., $\$ 1.90 ; 4$ ozs., $\$ 6.50$.


## EARLY BEAUTIES

A fine, long-stemmed class that always flowers in time to escape the average first frosts of the middle states.

- Early Beauty Silvery Rose. Fine, large flowered light rose.
- Azure Fairy. Long stemmed and large flowered azure-blue.

Crimson. Color similar to Heart of France.
Deep Rose. A good deep rose.
Purple. Long stemmed deep purple.
Shell-Pink (September Beauty). Delicate light pink.

- White. Long-stemmed and choice.

Prices above 7, each:
Tr. pkt., 40c; $1 / 4 \mathrm{oz} ., 90 \mathrm{c}$; $1 \mathrm{oz} ., \$ 3.00 ; 4 \mathrm{ozs} ., \$ 10.00$.
Early Beauty Mixture.
Tr. pkt., 30c; $1 / 4$ oz., 60c; 1 oz., \$1.90; 4 ozs., \$6.50.

## BOUQUET TYPE

A class of upright branching Asters developed for the cut-flower market. 24-inch plants carry $3-31 / 2$ inch, fully double flowers at the top, to be cut as one bunch.

## White Coppery Rose Crimson <br> Scarlet Rose-Pink

Powderpuffs. A showy blend of the above and other colors in this class.
Prices above 6, each: tr. pkt., 50c; $1 / 4$ oz., $\$ 1.50 ; 1$ oz., $\$ 4.50$.

## SINGLE ASTERS

Single Base-Branching Mixture. Upright, base-branching plants. Tr. pkt., 30c; $1 / 4 \mathrm{oz}$., 45c; 1 oz., $\$ 1.50 ; 4$ ozs., $\$ 5.00$.
Single Rainbow Mixture. (Special Florists' Strain). An attractive mixture of medium sized, single blooms.
Tr. pkt., 30c; $1 / 4$ oz., $45 \mathrm{c} ; 1 \mathrm{oz} ., \$ 1.50 ; 4$ ozs., $\$ 5.00$.

## MISCELLANEOUS RESISTANT MIXTURES

Double Varieties Mixed. Cut-flower mixture.
Tr. pkt., 30c; $1 / 4$ oz., 60c; 1 oz., $\$ 1.90$; 4 ozs., $\$ 6.50$.

## Non - Resistant Asters KIRKWELL

Similar to the Remo varieties except that blooms are somewhat more double. Plants are 12-14 inches tall and admirably suited for summer pot plants-flowering around mid-August.

| Light Pink | Crimson |
| :--- | :--- |
| Salmon-Pink | Dark Blue |
| Deep Rose | Mixture |

Deep Rose Mixture
rices above 6 varieties, each:
Tr. pkt., 75c; 1/4 oz., \$2.00; 1 oz., \$6.00.

## REMO

Two-inch flowers with yellow centers are freely produced on upright, branching plants $12-16$ inches tall. Cut entire plant. Light Rose Light Blue Dark Blue

Dark Red

## Mixture

Prices above 5, each: tr. pkt., 45c; $1 / 4 \mathrm{oz} ., \$ 1.25 ; 1$ oz., $\$ 3.75$.

## IMBRICATED POMPONS

( 17,000 seeds per oz.)
Small, rounded flowers produced on upright growing, compact plants about 15 inches tall. Excellent for pot plants.
Violet Light Blue with white center Scarlet
Prices above 6, each: tr. pkt., 40c; $1 / 40$ oz., 90c; 1 oz, $\$ 2.80$. Mixture of all colors. Tr. pkt., 30c; $1 / 1 \mathrm{oz} ., 70 \mathrm{c} ; 1 \mathrm{oz}, \mathbf{\$ 2 . 1 0}$.


This excellent May-flowering crop of White Ball Asters was produced from a December 20th sowing. Not hard to realize the profit potential in beauties like these!

# Making Ball Asters Pay! 

## GENERAL CULTURE

"Resistance" to Aster wilt does not mean complete "immunity"! While the degree of resistance offered by these strains may vary somewhat in different localities, there is no doubt that they are far more satisfactory than non-resistant strains. Our past experience indicates that changing the location of the Aster planting regularly (or steam sterilizing) is a worth-while safety precaution. We sow them 6 weeks before planting out date. Three weeks after sowing, the seedlings go into $2 \frac{1}{2}$-inch plant bands; three weeks later we plant thern without removing bands, which helps minimize transplanting losses. We space them a foot apart each way in beds so that conventional wire and string may be used for supports. We find cloth house protection a necessity if superior quality is wanted.

## OFF-SEASON ASTERS (UNDER GLASS)

Many growers have written us the past season to say that their
spring greenhouse Aster crops were the best paying crops that they had on their place. While Asters can be flowered any month of the year, the spring and early summer months seem to be the most profitable. The only important requirements are: $50^{\circ}$ night temperatures and additional lighting, which must be supplied continuously from the seedling stage until plants are 20 to 24 inches tall. The only exception is the period from May 1 to September 1 , during which day length is long enough. 60 -watt bulbs with reflectors, spaced 5 feet apart, or the lighting set-up you use for Mums is satisfactory. Lights must be turned on from sundown to $10 \mathrm{P} . \mathrm{M}$. daily.
Spacing may be anywhere from $8 \times 8$ to $10 \times 10$ inches-we use the latter for somewhat better quality. White Ball, Pink Ball and Rose Ball are especially fine for off-season culture. Azure Ball and Purple Ball do equally well, but these colors will be wanted in lesser quantity. Use sterilized soil for best results.

The following schedule worked out at Ohio State checks closely with our own experience where a $50^{\circ}$ night temperature was used.

## OPERATION

| Sow seed | July 15 | Aug. 15 | Sept. 10 | Oct. 20 | Dec. 20 | Feb. 1 | Mar. 15 | Apr. 20 | May 20 | June 10 | June 20 | July 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Band secdlings | Aug. 10 | Sept. 10 | Oct. 1 | Nov. 15 | Jan. 10 | Feb. 20 | Apr.1 | May 10 | June 10 | July 1 | July 15 | Aug. 1 |
| Bench plants | Sept. 15 | Nov. 1 | Dec. 1 | Jan.1 | Mar. 1 | Apr.1 | May 15 | June 15 | July 15 | Aug. 1 | Aug. 20 | Sept. 1 |
| Approx. flwg. date | January | February | March | April | May | June | July | August | September | October | November December |  |

## Non - Resistant Asters-Continued KING or NEEDLE TYPE <br> NON-RESISTANT MIXTURES

Attractively quilled petals give these flowers an outstanding appearance. Popular for shipping. Late August.
Lavender. Good commercial color.
Rose. A fine, deep rose-pink.
Salmon. A new shade in the King-type Aster.
Violet. A rich and striking color.
White. Popular market strain.
Shell-Pink. Soft, satiny pink.
King Mixture.
Prices above 7, each: tr. pkt., 40c; 1/4 oz., 90c; 1 oz., \$2.70;
4 ozs., \$7.00.

Giant California Sunshine Mixed. An attractive mixture of large flowered Anemone type blooms with small center cushions and long ray petals. Tr. pkt., 40c; $1 / 4 \mathrm{oz} ., 80 \mathrm{c} ; 1 \mathrm{oz}$., $\$ 2.50$.
Super Giant Los Angeles. Extra large. soft shell-pink.
Tr. pkt., 40c; $1 / 4 \mathrm{oz} ., 90 \mathrm{c} ; 1 \mathrm{oz.} \$$,3.00 .

- Burpeeana. Extra early bedding type mixture which flowered in our trials in late July. Large, fluffy, Crego type flowers on 18 -inch stems. Base branching. Originator's seed
Tr. pkt., \$1.50; $1 / 4 \mathrm{oz}$., $\$ 3.90$; 1 oz ., $\$ 11.75$.
California Super Giant Mixed. Choice blend of large, fully double "shaggy-petaled" flowers. Long-stemmed. Late Sept. Tr. pkt., 50c; 1/4 oz., \$1.00; 1 oz., \$3.25.


## Ball Beganias ~ the Most Useful



Fibrous-Rooted Begonias, by the nature of their growth, divide themselves readily into the three types pictured here; dwarf, intermediate and tall.

## FIBROUS ROOTED

(30,000 seeds per $1 / 32$ oz. ). Begonias are rapidly increasing in popularity as versatile all-around potted plants. They are equally "at home" in 5 -inch pots, as less expensive plants in 3 - or 4 -inch pots, and in combinations of all sorts. Here is one blooming plant which will do well in the low-light, high temperature conditions of modern homes.

In addition, the stronger growing varieties, especially the $\mathrm{F}_{1}$ Hybrids, make good bedding plants even in full sunand for partially shaded spots they are ideal.

Culture: Use neutral (non-acid) peat for germination; no covering over the seed (except paper till they sprout). Keep surface of flat moist. Use half peat, half soil for potting. They must

## EXTRA DWARF

- Ball Dwarf Carmen. Compact habit with rich bronze leaves and light pink flowers. Tr. pkt., \$1.50; 1/64 oz., \$3.50.
- Saga. Extra dwarf and dense growth. Small, bright red flowers. Tr. pkt., $\$ 1.50$; $1 / 64$ oz., $\$ 4.00$; $1 / 32$ oz., $\$ 7.50$.


## DWARF CLASS

- Adeline. Very free flowering bright pink; dwarf and compact. Tr. pkt., \$1.50; $1 / 64 \mathrm{oz}$., \$3.25; 1/32 oz., \$6.00.
- Ball Deep Rose. In winter the color is a deep rosy red which gradually fades to a luminous pink with the coming of warmer weather. Tr. pkt., \$1.50; $1 / 64$ oz., $\$ 3.25$; $1 / 32$ oz, $\$ 6.00$.
- Ball Red. Medium large flowers of bright true scarlet are freely nrodured on fairly dwarf. uniform plants. Tr. pkt., \$1.50; $1 / 64 \mathrm{oz} ., \$ 3.25 ; 1 / 32 \mathrm{oz}$., $\$ 6.00$.
Ball White. Rather small flowers but very freely produced. Tr. pkt., \$1.50; 1/64 oz., \$3.00; 1/32 oz., \$5.50.
Luminosa Compacta. Dwarf, free flowering scarlet-red.
Tr. pkt., $\$ 1.50$; $1 / 64 \mathrm{oz}$., $\$ 3.00$; $1 / 32$ oz., $\$ 5.50$.
- Snowbank. Large, glistening white flowers are carried on dense growing, even plants. The best white.
Tr. pkt., \$1.25; 1/64 oz., \$2.75; 1/32 oz., \$5.00.
Dwarf Varieties Mixed. Our own formula mixture of dwarf varieties. Tr. pkt., $\$ 1.00 ; 1$ º4 oz., $\$ 2.50$; 1/22 oz., $\$ 4.50$.
have $60^{\circ}$ to keep them moving-and
greenhouse shade in summer. Sow in January for flowering $21 / 4$ 's, shifting to 4's for May sales.
- Indian Maid. Foliage a deep lustrous bronze with scarlet flowers. Tr. pkt., \$1.25; $1 / 64$ oz., $\$ 2.75$; $1 / 32$ oz., $\$ 5.00$.
King of the Reds. Free flowering carmine-red; vigorous growth. Tr. pkt., \$1.25; $1 / 64 \mathrm{oz}$., $\$ 2.50$; $1 / 32$ oz., $\$ 4.75$.
- Luminosa. Very attractive and popular bright red.

Tr. pkt., \$1.25; 1/64 oz., \$3.00; $1 / 32$ oz., $\$ 5.50$.
Prima Donna. Medium rose-pink. Prefer Scandinavia Pink. Tr. pkt., \$1.25; $1 / 64 \mathrm{oz}$., $\$ 2.00$; $1 / 32 \mathrm{oz}$., $\$ 3.50$.

Salmon Queen. Salmon shaded rose with dark foliage.
Tr. pkt., \$1.25; 1/64 oz., \$2.50; 1/32 oz., \$4.50.

- Scandinavia Pink. Very free flowering bright rose-pink. Fine bushy habit. Tr. pkt., \$1.25; 1/64 oz., \$2.75; 1/82 oz., \$5.00.
- Scandinavia Red. Identical to the above except for its bright red flowers. Tr. pkt., $\$ 1.25$; 1/64 oz., $\$ 2.75$; $1 / 32$ oz., $\$ 5.00$.

Scandinavia White. A white Scandinavia selection.
Tr. pkt., \$1.25; $1 / 64 \mathrm{oz}$, , $\$ 2.75$; $1 / 32$ oz., $\$ 5.00$.
White Pearl. Medium sized white flowers with green leaves, tinged pink; reddish stems. Tr. pkt., \$1.25; 1/64 oz., \$2.50.

Intermediate Varieties Mixed. Made up of the above separate colors. Tr. pkt., \$1.25; 1/64 oz., \$2.25; 1/32 oz., \$3.75.

## TALL CLASS

Christmas Cheer. Large flowered, deep rose-red. Tr. pkt., \$1.00; $1 / 64 \mathrm{oz} ., \$ 2.00 ; 1 / 32$ oz., $\$ 3.75$.

Masterpiece. Extra large flowered, light pink.
Tr. pkt., \$1.25; 1/64 oz., \$2.25; 1/32 oz., \$4.00.
Pink Radio. Extra large flowered, rich rose.
Tr. pkt., \$1.25; $1 / 64 \mathrm{oz} ., \$ 2.25$; $1 / 32$ oz., $\$ 4.00$.
Silver Wings. Extra large, pure white flowers.
Tr. pkt., $\$ 1.00 ; 1 / 64 \mathrm{oz} ., \$ 2.00 ; 1 / 32$ oz., $\$ 3.75$.
Tall Varieties Mixed. A formula mixture of the above strong growing sorts. Tr. pkt., $\$ 1.00 ; 1 / 64 \mathrm{oz} ., \$ 1.50 ; 1 / 32$ oz., $\$ 2.50$.

- Carmen. Bright rose-pink flowers with rich bronze leaves.

Tr. pkt., \$1.25; $1 / 64$ oz., $\$ 2.75$; $1 / 32$ oz., $\$ 5.00$.
Fire Sea. Large carmine-red with green foliage.
Tr. pkt., \$1.25; $1 / 64 \mathrm{oz}$., \$2.50; 1/82 oz., \$4.50.

## Greenhouse

Potted


## BEGONIAS FOR BEDDING

Ordinarily you think of Fibrous-Rooted Begonias as a shade plant. Yet we have certainly been impressed with the wide diversity of use which is made of Begonias in open sun flower beds in Europe. In certain parts of France, Switzerland and Germany they are the No. 1 annual plant in terms of popularity. Two years ago we tried six varieties in our annual trial gardens. That summer was warmer than average in Chicago. We were greatly impressed not only with their generally attractive appearance, but with the amount of interest which they created among visitors, trade visitors and laymen alike.

As a general rule the $\mathrm{F}_{1}$ Hybrids, Intermediates, and Tall varieties seem to respond best to open sun outdoor planting. Try them on your customers. Fibrous Begonias, of course, can't be beat for shady locations.

## $F_{1}$ HYBRID (HETEROSIS) STRAINS

Seed of these varieties is produced by the same method as Hybrid Snaps and Petunias. For absolute uniformity they're unexcelled. Why not grow some this year?

- Pink Profusion. [若)Arbrids (New). A vigorous, dense grower with freely produced coral-pink flowers and green leaves with red veins. Did exceptionally well in outdoor trials last summer exposed to full sun and high temperatures. Try this for bedding. Tr. pkt., \$1.50.
- Pink Pearl. [Efarbaider Resembles Adeline in flower size, rich pink color and uniformly dwarf, compact growth. Originator's seed. Tr. pkt., \$1.50.
- Red Pearl. [(F) HYaRiD Dwarf. Identical to Pink Pearl except for its Luminosa-red color. Originator's imported Hybrid seed. Tr. pkt., \$1.50.
Pink Tausendschon. [FFHrBaid Dwarf. Bright pink; closely resembles Adeline and Pink Pearl in habit. Originator's seed. Tr. pkt., \$1.50.
 except for color. Originator's seed. Tr. pkt., $\$ 1.50$.



## TUBEROUS ROOTED BEGONIA

## OTHER BEGONIAS

TUBEROUS ROOTED SEPARATE COLORS Superb Camellia-flowered, double strains from one of the world's foremost Tuberous Begonia specialists.

| Red | Orange | Salmon | Yellow |
| :--- | :--- | :--- | :--- |
| Scarlet | Rose | Copper | White |

Prices above 8 separate colors, each:
$1 / 2$ tr. pkt., \$1.75; tr. pkt., \$3.00.

- Tuberous Rooted Double Mixed. Camellia-flowered. Our flow ering trials have consistently produced compact plants with $90 \%$ good doubles. Gorgeous colors.
$1 / 2$ tr. pkt., \$1.75; tr. pkt., \$3.00.
Lloydi Mixed. Pendulous. Double flowers, about 2 inches, in shades of scarlet, rose, salmon and white. Fine for hanging baskets. Tr. pkt., \$3.00.
Rex Hybrids. Mixture of ornamental-leaved Rex Begonias; many unusual variations. Tr. pkts. only, \$1.25.
Doty's Calla Queen. A novelty Fibrous Rooted Begonia with attractively variegated green and white foliage which contrast vividly with its red and pink flowers. Needs pinching. $1 / 2$ tr. pkt., \$1.75; tr. pkt., \$3.00.


## FOR SHADE

Following subjects enjoy more or less shade. Recommendations of these plants to those of your customers who have a "shade problem" might result in some increased business in these items.

| Alyssum | Coleus | Exacum |
| :--- | :--- | :--- |
| Gloxinias | Impatiens | Lobelia |
| Pansies | Salvia | Torenia |
| Fibrous | Begonias | Tuberous |



## ANNUALS-Continued BELLS OF IRELAND

(Molucella Laevis)

4200 S. This subject has become immensely popular with floral artists the past few years, being used in a wide variety of arrangements. Plants are base-branching with 2 - ft. stems closely set with large, bell-like sheaths of translucent green surrounding an inconspicuous, small white flower. May be used in the fresh or dried state and is easily grown in greenhouse benches, in pots or outdoors in summer. Tr. pkt., 40c; $1 / 4$ oz., \$1.25; 1 oz., \$3.75.

## BROWALLIA

Viscosa Compacta Sapphire. $240,000 \mathrm{~S}$. Compact growth with a profusion of small attractively light-eyed blue flowers. Tr. pkt., 40c; 1 16 oz., \$1.10; 1/8 oz., \$2.00.
Speciosa Major. 111,000 S. $1 \frac{1}{2}$-inch violet-blue flowers are carried on $10-12$ inch plants. The standard variety for pots. Tr. pkt., \$1.00; 1/16 oz., \$2.25; 1/8 oz., \$4.00; 1/4 oz., \$7.50.

## ARE YOU ON THE LIST FOR

GROWER TALKS? The only commercial monthly publication which is devoted exclusively to flower growing: suggestions for items to grow, sowing dates, insect disease controls, varieties, etc. Yours for 3 years for $\$ 2.50$. Binder for 24 issues of GROWER TALKS, \$1.50.

## Calcealarias

20,000 seeds per $1 / 32 \mathrm{oz}$. Calceolarias aren't at all difficult to grow from seed if a few simple requirements are met. In sowing use only loose, sterilized material-night temperature $60^{\circ}$. The seed is very fine and no soil covering should be used. When large enough to handle, they should go into $2^{1 / 2}$-inch bands--later into 4 - or 5 -inch pots for finishing. After banding, a $48^{\circ}$ house will suit them nicely. A regular insect control program is essential (aphis will wreck them in no time). We spray once a week with Parathion. From late February on they'll need protection from direct sun. Water only when dry; "wet feet" will cause yellowing of foliage.

## - EXTRA EARLY TIGERED

Solid heads of medium large flowers on dwarf plants; good color range. The outstanding feature of this strain is its earliness. It blooms a full month before other varieties, therefore costs you less to grow. Tr. pkt., \$1.25; $1 / 28$ oz., $\$ 2.75$; $1 / 64 \mathrm{oz}$., $\$ 5.00$; $1 / 32$ oz., $\$ 9.00$.

- Ball Multiflora Nana Mixture. Large heads of medium sized flowers in brilliant reds, yellows and intermediate shades. The dwarf plants are wiry in growth with small, durable leaves which make for ease in handling and shipping.
Tr. pkt., $\$ 1.25$; $1 / 128 \mathrm{oz} ., \$ 2.75$; $1 / 64 \mathrm{oz} ., \$ 5.00$; $1 / 32 \mathrm{oz} ., \$ 9.00$.
Cloth of Gold. Medium large, solid golden yellow flowers. Very showy. Tr. pkt., \$1.25; 1/64 oz., \$2.50; 1/32 oz., \$4.50.
- Dwarf Tigered or Spotted. Medium large flowers in spotted shades of red, yellow and rosy bronze. Dwarf and compact. Tr. pkt., \$1.25; $1 / 64 \mathrm{oz}$., $\$ 2.50$; $1 / 32 \mathrm{oz}$, $\$ 4.50$.
- Grandiflora Dwarf Mixed. Extra large ( $2-2 \frac{1}{2}$ in.) flowers in unusual and striking colors are carried on fairly dwarf plants. Tr. pkt., \$1.25; 1/64 oz., \$2.75; 1/32 oz., \$5.00.

Duplex Hybrids Mixed. Upper pouch of each flower is almost as large as the lower, giving an attractive duplexed effect. Plants are bushy, of medium height. Nice color mixture.
Tr. pkt., \$1.25; 1/128 oz., \$2.00; 1/64 oz., \$3.50.
Perennial Hybrids (Rugosa). Large heads of quite small flowers in a brilliant color mixture. Tr. pkt., \$1.25.

Triumph Strain. Medium large flowers; mostly bright reds and yellows. Tr. pkt., \$1.25; 1/64 oz., \$2.75; 1/32 oz., \$5.00.


CALCEOLARIA BALL MULTIFLORA NANA


## NEW RUFFLED WHITE CANDYTUFT

## CALENDULA

## GREENHOUSE VARIETIES. 3000 S .

Ball Calendulas were originated and developed by Geo. J. Ball as his first contribution to the long list of "Flower Seeds for Florists" which our firm has introduced to the florist trade in the past 50 years. Constant selection and breeding keep these strains in top shape.
This long-stemmed class will flower freely during the spring months from a January sowing.

- Ball Improved Long Orange. Long stemmed and large flowered.
- Ball Masterpiece. Deep glowing orange with dark eye.
- Ball Lemon Queen. Lemon-yellow with dark brown eye.
- Ball Gold. Deep golden yellow with light eye.

Campfire. Popular deep orange.
Prices above 5, each: tr. pkt., 50c; $1 / 4 \mathrm{oz} ., \$ 1.00 ; 1 \mathrm{oz}, \$ 3.00$;
4 ozs., \$9.00.
Ball Formula Mixture. Carefully made up of our named varieties with fully half orange.
Ball Art Shades Mixture. Contains many original and unusual shades and interesting bi-colors.
Prices above 2, each: tr. pkt., 40c; $1 / 4$ oz., 80c; 1 oz., $\$ 2.40$; 4 ozs., \$7.20.
BEDDING VARIETIES
Showy for bedding where summer heat is not excessive. The Pacific Beauty Class is preferred.

## PACIFIC BEAUTY CALENDULAS <br> These improved Calendulas are more resistant to summer heat than the ordinary bedding class. <br> Apricot Beauty. Attractive two-toned rich apricot. <br> Cream Beauty. Creamy white shading to soft yellow. <br> - Lemon Beauty. A pure lemon-yellow; wide petals. <br> - Persimmon Beauty. Brilliant, true persimmon-orange. <br> - Pacific Beauty Mixture. A blend of the above four. <br> Prices above 5, each: tr. pkt., 35c; $1 / 4$ oz., 60c; 1 oz., $\$ 2.00$.

Lemon Queen. Light lemon-yellow.
Orange King. Deep orange with dark eye.
Ball Bedding Mixture. Well proportioned dwarf mixture.
Prices above 3, each: tr. pkt., 20c; $1 / 1 \mathrm{oz} ., 30 \mathrm{c} ; 1 \mathrm{loz}$., $\$ 1.00$; 4 ozs., \$3.00.
Yellow Colossal. Extra double, clear bright yellow.
Tr. pkt., 35c; $1 / 4 \mathrm{oz}$., 50c; 1 oz., \$1.50.

## CALLIOPSIS

$90,000 \mathrm{~S}$. Fairly dwarf and very free flowering bedding plants. This is a showy item that we feel every bedding plant grower should try.

Gold Crest. Large ( $21 / 2$ to 3 in .) semi-double, golden yellow flowers with reddish brown eyes. Tr. pkt., 25c; 1 oz., 90c.
Dwarf Mixture. 6-8 in. Attractive dwarf, compact mixture of red and yellow shades. Tr. pkt., 25c; 1 oz., 90c.

## CAMPANULA

Annual Canterbury Bells Mixture. $50,000 \mathrm{~S} .2 \mathrm{ft}$. An annual form of the well known perennial, flowering 6 months from sowing. Tr. pkt., 35c; $1 / 4$ oz., $\$ 1.00 ; 1 \mathrm{oz}$., $\$ 3.00$.

## CANDYTUFT

## HYACINTH-FLOWERED. 9,500 S.

## - BALL GIANT WHITE

$14,000 \mathrm{~S}$. This is our greenhouse-grown, premium quality cut flower strain. Earlier flowering, and produces larger heads than ordinary strains with their high percentage of small-flowered culls.
Tr. pkt., \$1.00; 1/2 oz., \$1.95; 1 oz., \$3.35; 4 ozs., \$10.00.

Giant White, Regular. Tr. pkt., 25c; $1 / 2$ oz., 50c; 1 oz, 90c; $^{\text {c }}$ 4 ozs., \$3.00; 1 lb ., $\$ 10.00$.

- Ruffled White. Distinctively ruffled petals add interest to this excellent cut-flower strain. Pictured at left.
Tr. pkt., 50c; $1 / 4$ oz., $\$ 1.50 ; 1 \mathrm{oz}$, $\$ 4.50$.
Miniature Gem. A nice very early flowering rock or border plant; 4 in . high. White. Tr. pkt., 30c; $1 / 4 \mathrm{oz}$., 60c; $1 \mathrm{oz} ., \$ 1.80$.
UMBELLATA. A popular spring greenhouse cut flower. Sow in January; plant out $8 \times 10 \mathrm{in}$. Is also widely used as a winter outdoor crop in Florida and southern Texas.


## Carmine <br> Flesh-Pink <br> Lavender (Lilac) <br> White Rose Cardinal Formula Mixture

Prices above 6, each: tr. pkt., 20c; 1 oz., 55c; 4 ozs., $\$ 1.75$.
Dwarf Hybrids Mixture. For pots and combinations. Very early.
Tr. pkt., 30c; $1 / 4$ oz., 60c; 1 oz., $\$ 1.80$.
Perennial Candytuft. See Iberis, page 64.

## CANNA

Giant Mixed (Indica). 100 S . Select your own new varieties from this formula mixture of choice American-grown sorts. If sown in January, seedlings will usually bloom the first summer and selected plants may be propagated from tubers. Soak seed before sowing over good bottom heat.
1 oz . (about 100 seeds), $\$ 1.50$; 4 ozs ., $\$ 5.00$.

## CARNATION

14,000 S. From an early sowing planted outdoors, preferably under cloth protection, these strains will produce a nice crop of summer Carnations for cutting. Some supporting necessary.


CANNA

- Giant Malmaison, J. M. Bridgeford. Of sturdy upright habit. If well-grown, supported and disbudded, flowers comparable to those produced in the greenhouse can be had outside where summers are moderate. Many colors are represented in this superior mixture. Tr. pkt., 40c; $1 / 4 \mathrm{oz}, \mathrm{N} \$ 1.25$; $1 \mathrm{oz}, \$ 3.75$.
Marguerite Double Mixture. 15-20 in. Ours is a reselected strain of this very free flowering summer Carnation. An old favorite. Tr. pkt., 25c; $1 / 4$ oz., 65 c; 1 oz., $\$ 2.25$.

CHABAUD'S GIANT IMPROVED STRAIN. The preferred strain for outdoor bedding use.

- Cardinal Red (Sparkler) Crimson (Blood-Red)
Deep Rose (Rose Queen) Deep Salmon (Aurora)

Flesh-Pink (Reine Rose)
Salmon-Rose

- White (Jeanne Dionis)

Yellow (Marie Chabaud)

## Formula Mixture of all colors.

Prices above 9, each: tr. pkt., 40c; $1 / 4$ oz., $\$ 1.00 ; 1$ oz., $\$ 3.25$.
ENFANT DE NICE. A fine standard strain.
Red Salmon White Yellow Formula Mixture
Prices above 5, each: tr. pkt., 50c; $1 / 8$ oz., $\$ 2.25$.
Carnation Grenadin. See page 61.
Castor Bean. See Ricinus, page 42.

## Celosia Tareadar



BALL'S All-America Bronze Medal Winner

"FASHION FLOWER FOR 55!"

 of lustrous, bright red with scarlet highlights are carried on plants $18-20$ inches high. Stems are very stiff and sturdy with luxurious, bright green foliage. Most plants produce one stem with one enormous comb; the balance several base branching stems, each with a large comb.

Plants from seed sown in early April will be in full flower throughout August and September. Excellent as a bedding plant or for cutting. Holds its color well when dried if stored in a cool, dry place away from the sun. Normal spacing 12 inches. Tr. pkt., \$1.00; $1 / 8 \mathrm{oz}$. , \$2.20; 1/4 oz., \$4.00; 1 oz., \$12.00.

## OTHER CELOSIAS

$28,000 \mathrm{~S}$. One of our finest, most uniform and colorful offerings for annual plant sales. Don't pass up Fiery and Golden Feather. CRISTATA. The popular cockscomb type. The taller varieties provide good cut flowers in either the fresh or dried state, while the dwarf kinds make nice pot plants in summer. Closer spacing decreases size of heads, making them more suitable for cutting.

Gilbert's Gold Dust. (New.) Rich yellow ruffled combs turning a deep gold or chartreuse with maturity. Bright green foliage. $21 / 2-3 \mathrm{ft}$. tall. Originator's seed. Tr. pkt., 50c.
Gilbert's Rose Beauty. Ruffled, ball-shaped heads, about 6 in. across, are of a pleasing rose-pink underlaid with silver. Stem length is about 3 ft . Originator's tr. pkt. ( 300 seeds). 50c.
Gilbert's Maple Gold. Attractive combs varying in color from light to dark pink, tipped with gold. Grows 2 to 3 feet high and makes an excellent cut flower.
Originator's tr. pkt. ( 300 seeds), 50c.
Gladiator. (New.) 8 in . Golden yellow combs on dwarf plants with light green leaves.
Tr. pkt., 50c; $1 / 4 \mathrm{oz} ., \$ 1.50 ; 1 \mathrm{oz}, \mathbf{\$ 4 . 5 0}$.

- Kardinal. (New.) 8 in . A fine, new, uniform strain of red combs with green leaves. Immense blooms on extremely dwarf plants make Kardinal quite striking. Useful for pots, bedding, borders and combinations.
Tr. pkt., $\$ 1.00 ; 1 / 8$ oz., $\$ 2.20 ; 1 / 40$ oz., $\$ 4.00$.
- Red E Gold. (New.) 2 ft . Large combs gaily marked winered and yellow-gold with bright green leaves. A distinctive and unusual cockscomb Celosia.
Tr. pkt., 50c; $1 / 8$ oz., $\$ 1.50 ; 1 / 2$ oz., $\$ 5.00$.
- Royal Velvet. 30 in . Crimson combs borne well above foliage. Tr. pkt., 30c; 1/4 oz., \$1.00; l oz., \$3.00.
Empress. (Dwarf.) 12 in . Large crimson combs with deep reddish leaves. Tr. pkt., 30c; $1 / 4 \mathrm{oz} ., 80 \mathrm{c} ; 1$ oz., $\$ 2.40$.
Dwarf Mixture. 15 in . A choice mixture of all colors in this class with both light and dark foliage.
Tr. pkt., 30c; $1 / 4 \mathrm{oz} ., 80 \mathrm{c}$; $1 \mathrm{oz} ., \$ 2.40$.
Tall Mixture. 40 in . Mixture of all colors in the tall class. Tr. pkt., 35c; $1 / 4 \mathrm{oz} ., 80 \mathrm{c}$; 1 oz., $\$ 2.40$.

PLUMOSA. Plumed or feathery type, producing spire-like branches, mostly from base of plant. The dwarf varieties are widely used for bedding and as spring and summer pot plants, while the taller strains make useful cut flowers in late summer.

## - FOREST FIRE

(New.) $21 / 2 \mathrm{ft}$. Brilliant plumes of fiery orange-scarlet contrast strikingly with the bronzy red foliage. Visitors who saw this in our trial grounds last summer were impressed with its showiness and uniform habit.
Tr. pkt., 50c; $1 / 4 \mathrm{oz}$., $\$ 1.50$; 1 oz ., $\$ 4.50$.
Golden Fleece. 4 ft . Large, dense golden yellow plumes on vigorous plants. Makes a good cut flower.
Tr. pkt., 50c; $1 / 4 \mathrm{oz}$. , $\$ 1.50$; $1 \mathrm{oz} ., \$ 4.50$.
Scarlet Plume. 4 ft . Bright crimson-scarlet. Very colorful for fall borders and cutting.
Tr. pkt., 30c; 1/4 oz., 60c; 1 oz., \$2.00.
DWARF FEATHER VARIETIES
These "feather" varieties are really outstanding as a bedding subject where a rather dwarf, strong color accent is wanted. Also used for combinations and pots. Our trials of Fiery Feather and Golden Feather draw much favorable comment each year.

- Dwarf Fiery Feather. 12 in . Very attractive pyramid formation with fiery red spires.
- Dwarf Golden Feather. 12 in . Same as above but golden yellow.
- Dwarf Feather Mixture. A formula mixture of the above two varieties: $2 / 3$ Fiery Feather, $1 / 3$ Golden Feather.
Prices above 3 , each: tr. pkt., 30c; $1 / 8$ oz., 70c; $1 / 4$ oz., \$1.30; 1 oz., \$4.25.
- Thompsoni Magnifica. 28 in . Contains strikingly brilliant reds and yellows with some copper and gold shades. This makes an excellent cut flower. Tr. pkt., $30 \mathrm{c} ; 1 / 4 \mathrm{oz} ., 60 \mathrm{c} ; 1 \mathrm{oz} ., \$ 2.00$. Spicata. 5 ft . Long, slender, silvery rose spikes for fresh cut flowers or for drying. Tr. pkt., 25c; 1/4 oz., 60c; 1 oz., $\$ 1.80$. CHILDSII (Chinese Woolflower). An attractively different type with knobs or ball-like formations on the end of each branch. Mixture. Tr. pkt., 25c; $1 / 4$ oz., 50c; 1 oz., $\$ 1.75$.


## ANNUALS-Continued

## CENTAUREA

CYANUS (Bachelor Button or Cornflower). 6500 S. Attractive and useful for spring greenhouse cutting from a December or January sowing, and widely flowered outdoors in June and July from a fall sowing. All of the following are the finest reselected florist strains.

- Blue Boy. Intense, bright blue.

Black Boy. Rich deep maroon.
Red Boy. Deep carmine-rose.

- Pinkie. Attractive rose-pink.
- Snowman. Fine clear white.

Formula Mixture of above varieties.
Prices above 6, each: tr. pkt., 20c; $1 / 2$ oz., 40c; 1 oz., 65c; 4 ozs., \$2.20; 1 lb., \$6.50.

## DWARF CENTAUREAS

The following three are all dwarf and bushy, and are ideal for borders and general bedding. Height is 10 to 12 in. with the freely produced flowers closely packed on the plant. Also makes a satisfactory pot plant.

- Jubilee Gem. Bright cornflower-blue.
- Rose Gem. Medium rose.

Gem Mixed. Red, pink, blue, maroon, and white. Prices above 3 , each: tr. pkt., 30 c; $1 / 4$ oz., $60 \mathrm{c} ; 1 \mathrm{oz} ., \$ 1.80$.

IMPERIALIS (Sweet Sultan). 7500 S. Very showy thistle-like flowers; larger than the Cyanus type. Height 30 in.
Formula Mixture of white and lavender.
Tr. pkt., 20c; $1 / 4$ oz., 35c; 1 oz., \$1.00.
Suaveolens (Yellow Sweet Sultan). 6700 S. Bright yellow. 20 in. Forces well indoors.
Tr. pkt., 20c; $1 / 4 \mathrm{oz} ., 30 \mathrm{c}$; 1 oz., 90c.
AMERICANA. $2400 \mathrm{~S} .2-21 / 2 \mathrm{ft}$. Large flowers on 18 in . stems. Lilac. The preferred color.

## Mixture.

Prices above 2, each: tr. pkt., 20c; $1 / 2$ oz., 35 c; 1 oz., 65c; 4 ozs., \$2.00; 1 lb . \$6.50.

DUSTY MILLERS. The silvery white-leaved kinds for border work. Cineraria Maritima Diamond also belongs in this group.

Candidissima. 7500 S .6 in . The slow growing kind that must be started early. Tr. pkt., 50c; $1 / 4 \mathrm{oz}$., $\$ 1.10 ; 1 \mathrm{oz}$, $\$ 3.75$.

Gymnocarpa. 7300 S .24 in . Strong growing, fern-leaved. Tr. pkt., 20c; $1 / 4 \mathrm{oz} ., 30 \mathrm{c}$; 1 oz., 90 c; 4 ozs., $\$ 2.75$.
Centaurea Montana. See page 61.

## CHERRY, CHRISTMAS (Solanum)

$12,000 \mathrm{~S}$. Sow in February, summer plants outdoors; lift and pot in September for Christmas pot plants.

- Ball Christmas Cherry (Hlavacek's Masterpiece). A uniform, bushy strain. Large, round, red fruit is very freely produced. Tr. pkt., 50c; $1 / 4$ oz., $\$ 1.25$; 1 oz., $\$ 3.75$.
Patterson Christmas Cherry. A compact strain of Christmas Cherry. Well suited for smaller sized pots.
Tr. pkt., 75c; 1/4 oz., \$1.50; 1 oz., \$4.75.
Love Apple. See page 34.
Pepper, Christmas. See page 39.
Chinese Forget-Me-Not. See Cynoglossum, page 29.


## CHRYSANTHEMUM (Annual)

9000 S . A nice spring greenhouse "catch crop" for cutting. Also quite showy for bedding.

Eldorado (Segetum). Golden yellow with brown eye.
Northern Star (Carinatum). White; yellow zone, brown eye.
Prices above 2 , each: tr. pkt., 25 c; $1 / 4 \mathrm{oz} ., 50 \mathrm{c}$; 1 oz., $\$ 1.50$.

- Rainbow Mixture (Carinatum). A brilliant mixture of annual Chrysanthemums including many entirely new shades and color combinations. Tr. pkt., 35c; 1/4 oz., 60c; 1 oz., \$2.00.
Hardy Chrysanthemums. See page 61.


## CINERARIA

Cinerarias will make nice 3 -inch plants in May for combination work, if sown in January and kept growing right along. Sow from June on for Christmas and later.

## - FESTIVAL

This is our own small-leaved strain requiring a minimum of bench space. Plants are bushy and compact with even heads of medium sized, mostly white-eyed flowers in a brilliant color range.
$1 / 2$ tr. pkt., $\$ 1.75$; tr. pkt., $\$ 3.00$; $1 / 64 \mathrm{oz} ., \$ 4.50$; $1 / 32 \mathrm{oz}$., \$7.50; 1/16 oz., \$13.00.

- Siter's Rainbow Strain. 3500 seeds per $1 / 32$ oz. Immense heads of medium large, mostly white-eyed flowers. A first class strain. Tr. pkt., \$2.00; $1 / 64 \mathrm{oz} ., \$ 2.75$; $1 / 32 \mathrm{oz} ., \$ 5.00 ; 1 / 16 \mathrm{oz} ., \$ 9.00$.
- Cremer's Prize Strain. (Our own reselected stock). 6300 seeds per $1 / 32$ oz. Extra large heads of medium small flowers in widely varied color assortment; about half light-eyed. Small foliage. Tr. pkt., $\$ 1.75$; $1 / 64 \mathrm{oz} ., \$ 2.50 ; 1 / 32 \mathrm{oz}$., $\$ 4.50$; 146 oz ., $\$ 8.25$.
- No. 1 Mixture. Consists of Cremer's Prize Strain and Siter's Rainbow Strain in equal proportions. Tr. pkt., \$1.50; 1/64 oz., \$2.50; 1/32 oz., \$4.75.
- No. 2 Mixture. Contains $1 / 2$ Cremer's Prize Strain and $1 / 4$ each Siter's Rainbow Strain and Multiflora Nana, Gold Center Strain. Tr. pkt., \$1.50; $1 / 64 \mathrm{oz}$., $\$ 2.50 ; 1 / 32 \mathrm{oz}$., $\$ 4.75$.
- "Vivid" Formula Mixture. 162,000 S. A complete mixture of solid colors (without "eyes"). Dwarf with well rounded heads and fairly small leaves. Blooms about a month later than other strains.
Tr. pkt. ( 1000 seeds), $\$ 1.75$; $1 / 64$ oz., $\$ 2.75$; $1 / 32 \mathrm{oz}$., $\$ 5.00$. Also available in the following separate colors at the same price: White, Bright Red, Dark Red, Brick Red (Matador), Light Blue, Mid-Blue, Dark Blue, Pink Shades, and Salmon.
- Dwarf Erfurt Mixture. $140,000 \mathrm{~S}$. Dense heads of medium sized flowers in a fine color balance, including copper, salmon, and maroon in addition to the usual Cineraria colors. Habit is compact and very uniform. Tr. pkt., \$1.50; 1/64 oz., \$2.50.
- Multiflora Nana, Gold Center. 6300 seeds per $1 / 32$ oz. Attractive, medium small, solid colored flowers with yellow anthers. Good shipper. Tr. pkt., \$1.25; 1/64 oz., \$2.25; 1/32 oz., \$4.00. Berlin Market Mixed. (White-Eyed or Weissensee Strain). 3500 seeds per $1 / 32$ oz. Large, rounded heads of medium large flowers. Tr. pkt., \$1.00; $1 / 64 \mathrm{oz}$., $\$ 2.00$; $1 / 32$ oz., $\$ 3.75$.
Grandiflora Dwarf Mixed. 3500 seeds per $1 / 32$ oz. Large flowers in rich colors with contrasting large white eyes. Dwarf growth. Tr. pkt., \$1.00; $1 / 64 \mathrm{oz}$., $\$ 2.00$; $1 / 32 \mathrm{oz}$., $\$ 3.75$.
Dwarf Giant Exhibition Mixture. Extra large flowers on medium dwarf plants. For exhibition work only.
Tr. pkt., \$1.50; $1 / 64$ oz., $\$ 2.75$.
Stellata Mixture. (Star type). Small, free flowering strain. 24 to 30 in . tall. Tr. pkt., $\$ 1.00 ; 1 / 32 \mathrm{oz} ., \$ 2.50$.
DUSTY MILLER. $85,000 \mathrm{~S}$.
Maritima Diamond. 10 in . An improved strain of our finest Dusty Miller. Compact, even growth and very white foliage. Tr. pkt., 20c; 1/4 oz., 50c; 1 oz., \$1.50.


PLASTICARDS

## Plasticards

## The New Bedding Plant Merchandizer!

Growing problems have been pretty well solved. Here's a device to help you to sell more bedding plants.

## The problem:

Most of your customers are hard to convince about the color and quality of plants (especially new varieties) if they don't see what the actual bloom and plant look like.
Yet many varieties will not bloom in a flat or pot before they are ready to be sold.

Plasticards with authentic colorful pictures illustrate the blooming plant and will help you show, describe, and convince your customer of what he is buying.

Plasticards will help you put over a sale by giving you or your salesman a sales boost at the point of sale where it is needed most!

## Plasticards are

- Available with specially designed wire holder stakes to hold them 18 inches above the plants-one card so displayed will "cover" many flats with a sales boost. Two or more cards for each variety is, of course, even more effective.
- Designed to allow space to write prices or other information of interest to your customers. A special pencil for writing on plastic is provided with each set.
- Available for 25 of the most popular bedding varieties-see list below.


## ? Where else can you get a salesman who will work all spring for $\$ 11.00$

## PLASTICARDS AVAILABLE

PETUNIAS
Prima Donna
Crusader
Tango
Linda
Ball All-Double Mixture
Calif. Giants Mixed
Popcorn
Admiral
Comanche
PHLOX
Globe
COLEUS
Ball Rainbow Mixture

PANSY<br>Imported Swiss Giants<br>\section*{ZINNIAS}<br>Dahlia-Flowered Mix<br>Cactus-Flowered Mix<br>\section*{SALVIA}<br>St. John's Fire<br>SNAPDRAGONS<br>Hit Parade<br>Tetra Mixed<br>MARIGOLDS<br>Color Magic<br>Dwarf French Double

## DAHLIA

Unwin's Dwarf Mixed
AGERATUM
Blue Bedder
ALYSSUM
Royal Carpet
CELOSIA
Toreador
ASTER
Ball Mixed
VERBENA
Grandiflora Mixed

## PRICES

$\longrightarrow$ Special Offer. Collection of 25 Plasticards, one each of above
$\rightarrow \gg \rightarrow$ listed varieties, and 25 Stake-Holders. \$11.00.
$\longrightarrow 25$ Plasticards (without Stake-Holders). One each of above,
$\rightarrow$ \$7.50.

## Additional Plasticards and Stake-Holders

1 Plasticard, any variety . . . . . . . . . . . . . . . . . . . . . . . . . . \$0. 35
1 Plasticard with Stake-Holder ............................. . . 50
5 Plasticards, any one variety, @ 33c .................... 1.65

5 Plasticards, any one variety, with Stake-Holders, (a 48c. \$2.40
10 Plasticards, any one variety, (a) $30 \mathrm{c} \ldots . . .{ }^{2} \ldots . .$.
10 Plasticards, any one variety, with Stake-Holders, @ 45c
Minimum total order, 10 cards.
Iron Stake-Holders may be purchased separately for 15 c each. Minimum order 10 stakes.

All Plasticards and Stake-Holders prepaid anywhere in U.S.A.

## NEW 1955 BEDDING PLANT POSTER

This is the same poster we sent you free with our Fall Flyer. To give you an idea of how it looks, last year's poster is shown at right. Over 4 ft . long and 11 in . high, the new poster features 27 varieties, which should increase your bedding plant sales. We are making these available to you at cost, 25c each. Postpaid.



PINK RAINBOW


CANDIDUM


RED RAINBOW

## GROW colorful Qaleus from ball seeds

$100,000 \mathrm{~S}$. Growers throughout the country are relying more heavily on Ball Rainbow Mixed Coleus seed for their requirements of this fine foliage plant.

Originated over a decade ago by George J. Ball, our seed of this uniquely fine strain is grown in our West Chicago greenhouses under our careful, daily supervision.

## THREE NEW VARIETIES

This year we are offering three distinct new, separate colors
originally selected out of the Rainbow Mixture. These strains come at least $90 \%$ uniform to the colors shown above-the balance being entirely salable specimen plants. This offer, therefore, makes straight colors similar to named cutting varieties like Butterfly, Christmas Gem and Brilliancy available from seed. Cuttings from these seedlings root freely, of course. The plant habit is dwarf and base-branching, and satisfies all the requirements of this versatile shade-house plant subject. Ideal for combination boxes or pots.

## BALL RAINBOW COLEUS

- Ball Rainbow Mixture. Developed over a decade ago by Geo. J. Ball, through careful selection the Ball Rainbow Coleus Strain has no equal in the world today. We have trialed all important commercial strains-none match this strain for its high percentage $(90 \%)$ of bright warm Coleus colors which even excel the brilliance and luster of many of the best known cutting propagated varieties. Rich reds, yellows, coppers, pinks, all abound in infinite varieties of tones and shades. Uniform habit. Ideal for combinations, shade planting, and wherever Coleus are useful. This seed is greenhouse-grown at West Chicago. 1/2 tr. pkt., \$1.00; tr. pkt., \$1.75; 1/64 oz., \$2.75; 1/32 oz., \$5.25; 1/16 oz., \$9.50.

Red Rainbow (Hybrida No. 5). A bright combination of deep mahogany-red and brilliant carmine-rose edged green. Bushy plants with medium sized leaves. $85-90 \%$ true to type.
Pink Rainbow. (New.) Medium sized leaves of rich coralpink blending to salmon with small green border. Unusually attractive and $85-90 \%$ true to type.
Candidum. (New.) A striking combination of brilliant green and soft ivory. Wonderfully showy for use in plant combinations, blending well with all other colors. $90 \%$ true to type. Limit 1 tr. pkt.
Prices above 3 , each: $1 / 2$ tr. pkt., $\$ 1.50$; tr. pkt., $\$ 2.50$.

Rainbow Mix. (Regular.) This is a field-grown mixed strain. Assorted colors. Not recommended where top quality colors are desired.
Tr. pkt., 75c; 1/32 oz., \$1.80; 1/16 oz., \$3.25.
Giant Exhibition Mixture. An extra large-leaved strain with exceptional brilliance of coloring.
Tr. pkt., \$1.25; $1 / 32$ oz., $\$ 2.50$; 1/16 oz., \$4.75.

## CLEOME

(Spider Plant)
Golden Sparkler. 5500 S. Bright golden orange. An unusual Cleome color. Germinate cool or sow directly outside.
Tr. pkt., 50c; 1/4 oz., 90c; 1 oz., $\$ 2.70$.
Helen Campbell. 12,500 S. A sport of Pink Queen, with glistening pure white flowers.
Tr. pkt., 50c; 1/4 oz., 90c; 1 oz., \$2.70.

- Pink Queen. $12,500 \mathrm{~S}$. The newly opened flowers of the large ( 6 to 7 in .) heads are a luminous rosy pink, later changing to pure white for a pleasing bi-color effect. Makes a gorgeous hedge-like row about 4 ft . tall and 3 to 4 ft . across.
Tr. pkt., 35c; $1 / 4$ oz., 55c; 1 oz., $\$ 1.90$.

Ball Copper Giant. Produces large leaves of a pleasing copperrose shade and comes about $75 \%$ true to type.
Tr. pkt., \$1.25; 1/32 oz., \$2.50.
Glory of Vichy. A popular strain predominating in the lighter, more golden shades. Tr. pkt., 60c; 1/32 oz., $\$ 1.50$; 1/16 oz., $\$ 2.50 ; 1 / 8 \mathrm{oz} ., \$ 4.00 ; 1 / 4 \mathrm{oz}$ 。, $\$ 7.00$.

CLEOME PINK QUEEN

## CLARKIA

ELEGANS DOUBLE. $90,000 \mathrm{~S}$. Popular for spring cut flower use. Sow in January and grow in flats, disbudding to 2 or 3 spikes for long-stemmed flowers. Don't feed and keep fairly dry after plants are about a foot high to prevent over-soft, lanky growth.

Orange King
Salmon Queen Mixture
Prices above 5, each: tr. pkt., 20c; 1/4 oz., 35c; 1 oz., \$1.25.

## CLEOME

See page 27.

## COBAEA

(Cup and Saucer Vine)
SCANDENS. 375 S. A popalar, strong growing, annual climber.

## Purple

White
Prices above 2, each: tr. pkt.. 30c; 1/t oz., 60c; 1 oz., \$1.80.

## COLEUS

See page 27.

## CROSSANDRA

## For Potted Plants

An attractive and valuable pot plant with glossy, Gardenialike foliage, and flower spikes of overlapping clear salmon florets. Can be sown at any time but most easily started in early spring, and flowers in 7 to 8 months in a warm house and in rich, well drained soil. Requires at least $70^{\circ}$ night temperature for satisfactory germination. Minimum of 65 for best growth. 50 seeds, $\$ 2.00 ; 200$ seeds, $\$ 6.00$.



## DAHLIA, UNWIN'S DWARF HYBRIDS

## CORN, ORNAMENTAL

Rainbow (Calico or Indian Squaw). 90 S . Kernels of various colors make attractive ears for fall decorations. $1 \mathrm{oz} ., 20 \mathrm{c} ; 4 \mathrm{ozs} ., 50 \mathrm{c} ; 1 \mathrm{lb} ., \$ 1.50$.
Strawberry. 590 S . The attractive, tiny 2 -in. ears of rich, shiny mahogany contrast with the straw-colored husks when folded back. Grand for fall floral arrangements. $1 \mathrm{oz} ., 40 \mathrm{c}$; 4 ozs., $\$ 1.40$; $1 \mathrm{lb} ., \$ 4.00$.

- Striped. (New.) $6-8 \mathrm{ft}$. Here is an ornamental-leaved corn which is quite attractive with its contrasting clear yellow stripes on dark green foliage. Try it for floral arrangements.
$1 \mathrm{oz}$. . 40c; 4 ozs., \$1.40; $1 \mathrm{lb} ., \$ 4.00$.


## COSMOS

SENSATION. 5000 S . The most satisfactory class of Cosmos to grow for cut-flower purposes. Extra large flowers and extreme earliness make them suitable for growing outdoors even in northern climates.

- Pinkie. Clear orchid-pink.
- Purity. Extra large flowered pure white.
- Mixture of above and other shades.

Prices above 3, each: tr. pkt., 25c; 1/4 oz., 40c; 1 oz., \$1.15.
Radiance. Deep rose petals with large, rich crimson eye. A striking color combination.
Dazzler. Bright crimson-red. This is a marked improvement over strains previously offered.
Prices above 2, each: tr. pkt., 25c; 1/4 oz., 50c; l oz., \$1.60.
EARLY SINGLE MAMMOTH FLOWERED
Queen Mixture. 5000 S . All colors in this large flowered class.
Tr. pkt., 25c; $1 / 4$ oz., 50c; 1 oz., $\$ 1.60$.
EXTRA EARLY DOUBLE CRESTED. 5000 S . Produces around $60 \%$ large crested flowers.

Mixture. Tr. pkt., 30c; 1/4 oz., 75c; 1 oz., \$2.50.
HYBRIDA KLONDYKE. 2800 S .
Orange Ruffles. An attractive semi-double; the same bright orange as the old Orange Flare but even earlier flowering and slightly more dwarf.
Yellow Ruffles. Same type as Orange Ruffles, but a pleasing clear yellow.
Prices above 2, each: tr. pkt., 25c; $1 / 4$ oz., 50c; 1 oz., $\$ 1.50$.

- Fiesta. Yellow. striped orange. Lively color combinations. Not as vigorous as other Cosmos. Tr. pkt., 40c; 1/4 oz., \$1.20; 1 oz., $\$ 3.60$.


## Ball Cyclamen

We conduct regular and extensive flowering trials of Cyclamen strains from the world's leading seed producers in addition to examining these strains, as they are grown in Europe and America.


Our conclusion is that no one Cyclamen seed specialist excels in all varieties. As a result, the Ball strains include only those in which each grower (according to our observation-not the grower's claim) excels.

DISCOUNTS-In addition to our regular cash discounts, the following special discounts are allowed on Cyclamen seed: 250 of a variety at 1000 rate (except Vogt's); 10,000 to 25,000 seeds, any assortment, $5 \%$; over 25,000 seeds, $10 \%$.

## CUPHEA

7000 S. Very attractive and easily grown bedding plants.

- Firefly. Dense, compact plants reaching a height of 12 in . with freely produced, small, bright scarlet flowers. Also makes an attractive spring pot plant.
Tr. pkt., 25c; 1/8 oz., 75c; 1/4 oz., \$1.35.


## CYNOGLOSSUM

AMABILE. Chinese Forget-Me-Not. 5000 S .

- Firmament. Fine bushy, compact plants with freely produced small flowers of the most intense clear blue. An excellent bedding plant that stands hot, dry weather well.
Tr. pkt., 20c; $1 / 4$ oz., 40c; 1 oz., \$1.35.
Blue Bird. An improved, upright-growing type; rich, bright blue. Tr. pkt., 20c; $1 / 4$ oz., 35 c ; 1 oz., $\$ 1.15$.


## DAHLIA

2800 S. Because of the wide variation in colors and types, seedling Dahlias are interesting to grow and tubers may be saved from the choicest specimens. The dwarf types are especially nice for outdoor bedding while the Unwin strain also makes a fine pot plant. All flower the first season from an early sowing. Should be sown several weeks ahead of other annuals for maximum bloom the first year.

## - UNWIN'S DWARF HYBRIDS

The compact, dwarf plants of our special strain produce a profusion of $21 / 2$ - to 3 -inch double and semi-double blooms in a lavish assortment of exquisite colors. Seed sown during January will produce salable 3- to 4 -inch flowering pot plants in May. Pictured on opposite page.

Tr. pkt., 30c; 1/ oz., 80c; 1 oz., \$2.75; 4 ozs., $\$ 8.50$.

## DAHLIAS, Continued

Giant-Flowered Mixed. A tall-growing mixture producing 50\% giant double flowers of the very best types and colorings. Must be sown early to insure blooms before frost.
Tr. pkt., 60c; 1/s oz., \$1.85; 1/t oz., \$3.50; 1 oz., \$10.00.
Cactus Mixed. 3 to 4 ft . Large, deuble and semi-double Cactus type flowers in many colors.
Tr. pkt., \$1.00; 1/4 oz., \$2.50; 1 oz., \$7.50.
Pompon Mixed. 3 ft . Medium to small double and semi-double flowers in a wide color range.
Tr. pkt., \$1.00; 1/1 oz., \$2.50; 1 oz., \$7.50.
COLTNESS STRAIN. Dwarf and free flowering single.
Mixture of all colors. Tr. pkt., 25c; $1 / 4$ oz., 50c; 1 oz., \$1.75.

## DAISY

Dahlborg Daisy. 150,000 S. 6 in. An unusually attractive compact edging plant with airy, lace-like leaves, and a profusion of small yellow flowers. Tr. pkt., 60c; 1/s oz., \$1.40.
Tahoka Daisy. 29,500 S. Single, Daisy-like flowers of lavenderblue with deep yellow centers.
Tr. pkt., 30c; $1 / 8$ oz., 75 c; $1 / 40 \mathrm{oz}$., $\$ 1.25$; 1 oz., $\$ 3.75$.
Blue Daisy. See Agathea, page 14.
English Daisy. See Bellis, page 60.
Painted Daisy. See Pyrethrum, page 66.
Perennial Daisies. See page 61.

## DATURA

Wrighti (Angel's Trumpet). 2500 S .3 ft . Large, white-tinted orchid flowers. Tr. pkt., 30c; 1/4 oz., 65c; 1 oz., $\$ 2.00$.

## ANNUALS-Continued DELPHINIUM CHINENSIS

## (Annual Delphinium)

20,000 seeds per oz.

- Blue Mirror. Bright navy-blue flowers without spurs Tr. pkt., 55c; 1/4 oz., \$1.25; 1 oz., \$3.75.
- Cambridge Blue. The standard Belladonna-blue variety. Tr. pkt., 40c; $1 / 4 \mathrm{oz}$., 80c; 1 oz., $\$ 2.75$.
Mixture. Tr. pkt., 20c; $1 / \pm$ oz., 40c; 1 oz., \$1.35.


## DIANTHUS

$25,000 \mathrm{~S}$. Wonderfully showy and free flowering bedding plants.

- Sweet Wivelsfield Single Mixed. 12 in . Probably the most popular of the annual Dianthus. Free flowering and brilliantly colored. Tr. pkt., 15c; $1 / 4$ oz., 35c; 1 oz., $\$ 1.00$.
Sweet Wivelsfield Double Mixed. Same as above but most flowers either semi-double or double.
Tr. pkt., 30c; $1 / 4$ oz., 70c; 1 oz., $\$ 2.25$
Westwood Beauty (D. Heddensis). Pleasing 2 -inch, single flowers in shades of red on long stems. Somewhat more resistant to heat than ordinary Dianthus.
Tr. pkt., 30c; $1 / 4 \mathrm{oz} ., 60 \mathrm{c}$; $1 \mathrm{oz} ., \$ 2.00$.
- Gaiety. Large, single fringed flowers. The showy colors range from pure white to crimson and are attractively zoned.
Tr. pkt., 35c; 1/4 oz., 75c; 1 oz., \$2.50.
HEDDEWIGI (Double Pinks). 10 in.
Fireball. Deep scarlet.
Snowdrift. Pure white.
- Imperator Mixture of all colors in this double class. Prices above 3 , each: tr. pkt., 20c; $1 / 4$ oz., 40c; 1 oz., $\$ 1.35$. Hardy Dianthus. See page 61.
- Double Gaiety. Brilliant shades in a full range of colors, including bright salmon and scarlet.
Tr. pkt., 35c; $1 / 4$ oz., 75c; 1 oz., \$2.50.


EXACUM AFFINE


DIANTHUS WESTWOOD BEAUTY

## DIDISCUS

10,000 S.
Blue Lace (Coeruleus). Small heads of light lavender flowers in sprays. Useful for spring forcing, or outdoors in cool climates. Tr. pkt., 25c; $1 / 4 \mathrm{oz} ., 60 \mathrm{c} ; 1 \mathrm{oz} ., \$ 1.80$.
Lace Veil. Identical to Blue Lace except for its pure white flowers. Tr. pkt., 35c; 1/4 oz., \$1.00; 1 oz., \$3.00.

## DIMORPHOTHECA (Cape Marigold)

## 9500 S .

Aurantiaca Mixed. 6 to 10 in. 2-inch single Daisy-like flowers in bright yellow, buff and orange shades. Tr. pkt., 20c; $1 / 4 \mathrm{oz} ., 40 \mathrm{c}$; 1 oz ., \$1.25.
Salmon Beauty. Soft salmon-pink.

- Glistening White. Large, Daisy-like flowers with black eye, edged violet. Spreading plants $10-12 \mathrm{in}$. tall.
Prices above 2, each: tr. pkt., 40c; $1 / 4$ oz., $\$ 1.00 ; 1$ oz., $\$ 3.25$.


## DRACAENA

Indivisa. 1500 S . The narrow-leaved and most popular variety. Tr. pkt., 20c; 1 oz., 55c; 4 ozs., \$1.65.
Australis. 1000 S. The broader-leaved kind.
Tr. pkt., 20c; $1 / 4 \mathrm{oz} ., 35 \mathrm{c}$; 1 oz., $\$ 1.00$.
Dusty Miller. See Cineraria, page 25, and Centaurea, page 25.

## ECHIUM

Blue Bedder. $6500 \mathrm{~S} .14 \mathrm{in}$. Small, bell-shaped flowers throughout the summer. Tr. pkt., 25c; $1 / 4$ oz., 60c; 1 oz., $\$ 1.80$.

## EUPHORBIA

Variegata (Snow-on-the-Mountain). 2500 S .2 ft . Green leaves with white edges. Tr. pkt., 20c; 1 oz., 60c; 1 lb., $\$ 5.50$.
Heterophylla (Annual Poinsettia or Mexican Fire Plant). 5000 S .36 in . Upper leaves blotched with red.
Tr. pkt., 30c; $1 / 4 \mathrm{oz} ., 70 \mathrm{c}$; 1 oz., $\$ 2.10$.
Hardy Euphorbias. See page 62 .

## EXACUM

- Affine. $1,000,000 \mathrm{~S}$. An excellent summer pot plant with richly fragrant violet-blue flowers. A Dec.-Jan. sowing with 3 to 5 seedlings in a 4 - or 5 -inch pot will make fine plants for summer sales. Shade glass during hot weather.
Tr. pkt., \$1.25; 1,128 oz., \$3.00; 1/64 oz., \$5.50.


Otto Panzer, whose originator strain of Panzer Scarlet Gloxinia seed is used in Panzer's extensive plant sales in the Pacific Northwest.

## FREESIA

3000 S. Freesias are enjoying a "come-back" in popularity today, due to the fine new seed strains which make it possible to grow good cut flowers from seed, thus eliminating the problem of diseased bulbs and uncertainty of the crop. Seed sown in May will produce bulbs by September which will bloom the following January. Soak seed 24 hours before sowing.
SUPER GIANTS. The most choice strain, imported from a European specialist. Large flowers and long stems.
White Blue and Lilac Shades Red and Pink Shades Yellow and Orange Shades Mixed Colors
Prices above 5, each: tr. pkt., \$1.00; 1/8 oz., \$2.25; $1 / 2$ oz., \$7.50.
Refracta alba. White. Tr. pkt., 60c; $1 / 4 \mathrm{oz} ., \$ 1.35 ; 1 \mathrm{oz.} \$$,4.00 .
Rainbow Hybrids. Attractive mixture of blues, yellows and reds. Tr. pkt., 75c; $1 / 8$ oz., $\$ 1.50 ; 1 / 4$ oz., $\$ 2.75$; 1 oz., $\$ 8.25$.

## FUCHSIA

HYBRIDA.
Special Mixture. A choice mixture of single and double types saved from one of the finest collections in the country. 350 seeds, $\$ 3.00 ; 700$ seeds, $\$ 5.50 ; 1400$ seeds, $\$ 10.00$.

## GAILLARDIA

PICTA. $14,000 \mathrm{~S}$. Brightly colored, popular plants for beds and borders. The taller varieties make useful summer cut flowers.

## - SUNSHINE DOUBLE MIXED

2 ft . Fully double flowers about $21 / 2 \mathrm{in}$. across are carried on strong stems 16 to 18 in . long. Attractive shades of winered, yellow and bicolor red and yellow. Good for summer cut flowers. Tr. pkt., 30c; 1/4 oz., 70c; 1 oz., \$2.40.

Indian Chief. 12 to 15 in . An even and very free flowering single strain with solid red flowers.
Lorenziana Double Mixed. 12 in. Quite attractive and free flowering double strain of orange, yellow, red and rose shades.
Prices above 2, each tr. pkt., 20c; $1 / 4$ oz., 35c; 1 oz., $\$ 1.00$.
TETRA.

- RED GIANT. 22 in. $2^{1 / 2}$-inch single flowers of solid, bright coppery red are produced in abundance on vigorous, bushy plants. Tr. pkt., 30c; $1 / 4 \mathrm{oz} ., 90 \mathrm{c} ; 1 \mathrm{oz} ., \$ 2.70$.
Perennial Gaillardia. See page 62.


## GLOXINIA

## PANZER SCARLET-Originator's Seed

We are happy to again offer (after 10 years' absence from the market) originator's seed of this noted strain. This deep, bright velvety red is the color in Gloxinias-Mr. Panzer produces many thousands of Gloxinias for shipping and offers this color only. The originator's strain has been reselected by Mr. Panzer and is now offered with assurance that it has no peer in commercial Gloxinia seed strains.
Tr. pkt., \$3.00; 5 tr. pkts., \$13.50.

Try Gloxinias from seed. A December sowing ( $70^{\circ}$ and very light or no covering for best germination), carried along at $65^{\circ}$ during the winter will make lovely 5 -inch blooming plants in June. Suggest soil made of $1 / 3$ peat, $1 / 3$ light organic soil and $1 / 3$ sand. Shade lightly and water with care not ever to let them dry out. Keep them growing. 3 -inch spacing in flats or open beds is O.K. instead of small pots for first transplanting. 25,000 seeds per 1/32 oz.

- Panzer Strain. European grown seed of Panzer's Scarlet. Tr. pkt.. \$1.25; 6 pkts., \$6.00.
Formula Mixture. Made up of choice named separate color varieties. All colors except yellow are represented including bicolors and spotted types. Also available in straight colors at same price. Tr. pkt., \$1.25; 6 pkts., \$6.00.


## MMPORTED FLEXIBLE-LEAVED STRAIN

This new strain is reported by its originator to have softer and more flexible leaves than the ordinary type, permitting it to be handled and packed without danger of leaf breakage.
Blood Red Blue

Prices above 2, each: tr. pkt., \$2.00; 1,128 oz., $\$ 6.00$.

## GAZANIA

Splendens Grandiflora Mixed. $12,000 \mathrm{~S}$. Medium sized single and semi-double flowers in shades of yellow and white. The vigorous plants are constantly in bloom. Stands hot, dry weather well. Tr. pkt., 50 c ; $1 / 4 \mathrm{oz}$., $\$ 1.25$; 1 oz ., $\$ 3.75$.

## GERANIUM

Zonale. 6200 S . A mixture of single types in shades of white, pink, salmon and red. Easily grown from seed, but should be sown early for summer blooms.
Tr. pkt., 50c; $1 / 1 \mathrm{oz} ., \$ 1.25$; 1 oz., $\$ 3.75$.

## GERBERA (Transvaal Daisy)

Duplex Hybrids. $8000 \mathrm{~S} .2-21 / 2 \mathrm{ft}$. This splendid strain produces large 5 -inch flowers with twice as many petals as the ordinary single type. All colors, except blue, are represented with flowers being carried on long, strong stems.
100 seeds, 65c; 1000 seeds, $\$ 5.50 ; 5000$ seeds, $\$ 25.00$.

## GESNERIA

Macrantha. $145,000 \mathrm{~S}$. The Gloxinia-like leaves of this attractive pot plant are crowned with an upright central stem bearing many slender, tubular, brilliant scarlet flowers from the leaf axils. Sow January to March for late fall and Christmas plants. Keep shaded during summer. Tr. pkt., \$1.25.

## GLADIOLUS

Color Cavalcade. (New.) A wonderful assortment of colors from hand-pollinated crosses. If seed is sown in fall, bulblets may be harvested in March and replanted in May to be harvested in fall as blooming size bulbs for following spring planting. 250 seeds, 50c.


GYPSOPHILA
COVENT GARDEN MARKET

## GODETIA

$95,000 \mathrm{~S}$. Should be grown in flats or shallow benches for green house cut flowers. Handle like Clarkia.
UPRIGHT SINGLE. 18 in . This class is especially attractive and much grown for greenhouse cut flowers

Duke of York. Bright carmine and white.
Kelvedon Glory. Rich apricot.
Prices above 2, each: tr. pkt., 25c; $1 / 4$ oz., 60c; l oz., \$1.90.
TALL DOUBLE. 2 ft .
Mixture of colors. Tr. pkt., 20c; $1 / 4$ oz., 50c; 1 oz., $\$ 1.50$. DWARF DOUBLE AZALEA.FLOWERED

Sybil Sherwood. 18 in. Bright salmon-pink, edged white.
Tr. pkt., 30c; 1/4 oz., 60c; l oz., \$2.00.

## GOMPHRENA (Globe Amaranth)

GLOBOSA. 5500 S . A very showy garden flower, and the taller varieties have some value for cutting. Does exceptionally well in hot, dry locations but is "at home" almost anywhere. Better try some Gomphrena if you've never grown it.

Rubra. 2 ft . One-inch ball-shaped flowers of bright reddish purple.
Mixture of purple, silvery white and orange.
Prices above 2, each: tr. pkt., 15 c ; $1 / 4 \mathrm{oz} ., 35 \mathrm{c} ; 1 \mathrm{oz}, \$ 1.10$.

- Buddy. 9 in. Fairly dwarf plants with small, ball-shaped flowers of bright reddish purple. This is the true dwarf strain. Fine for bedding, pot plants or combination boxes.
Tr. pkt., 30c; 1/4 oz., 75c; 1 oz., \$2.25.


HELIOTROPE, FIRST SNOW

## ANNUALS-Continued GOURDS, ORNAMENTAL

SMALL VARIETIES. 450 S . All are easily grown and, when properly dried and varnished, last indefinitely.
Spoon. Orange and green fruits with long, slender necks.
Warted Types Mixed. Not over 4 in . in diameter.
Small Varieties Mixed. Offered in place of the La Montagne strain which is no longer available.
Prices above 3, each: tr. pkt., 25c; l oz., 90c.

## GRASSES, ORNAMENTAL

Pennisetum Rueppelianum (Fountain Grass). 14,500 S. 3 to
4 ft . Long, graceful purple sprays. Tr. pkt., 35c; $1 / 4 \mathrm{oz} ., \$ 1.00$; 1 oz., \$3.00.
Lawn Grass. See page 68.

## GREVILLEA

Robusta (Australian Silk Oak). 3000 S. Seed sown in early spring and grown in a temperature of $60^{\circ}$ will make nice $5-\mathrm{in}$. pot specimens by fall. Because it holds its foliage well, it is being used with Poinsettias instead of Asparagus. Tr. pkt., 30c; $1 / 4 \mathrm{oz}$., \$1.00; 1 oz ., $\$ 3.00$.

## GYPSOPHILA

ELEGANS (Baby's Breath). $24,000 \mathrm{~S}$. Easily flowered in flats in the greenhouse or may be grown outdoors; requires about 3 months to bloom from sowing. Although the larger flowered varieties are attractive and fine, the smaller ones outlast them for bouquet work. - Covent Garden Market. A very excellent strain with large and full-petaled white flowers, about $75 \%$ of which have 6 to 8 petals. $1 \mathrm{oz}$. , 30c; 4 ozs., 75c; 1 lb ., \$2.50; 5 lbs., \$10.00.

- Paris Market. Smaller flowered than Covent Garden Market. Used extensively in southern states for winter blooming. Holds up well. 1 oz., 30 c; 4 ozs., $\$ 1.20$; 1 lb ., $\$ 3.60$.
Carminea. Small, $1 / 4$-in. pink flowers. Tr. pkt., 15 c ; 1 oz . \$1.20; 4 ozs., \$4.00.
Crimson. Slightly darker than above. Tr. pkt., 15c; l oz., \$1.20; 4 ozs., \$4.00.
Hardy Gypsophila. See page 62.


## HELIANTHUS (Sunflower)

- Sungold. 650 S . Of uniform medium height ( 4 to 5 ft .) with practically $100 \%$ fully double, golden yellow Chrysanthemum like flowers about 4 in . across. Sow outdoors in May for August blooming. Tr. pkt., 20c; 1/4 oz., 30c; 1 oz., 90 c; 4 ozs., $\$ 3.00$; $1 \mathrm{lb} ., \$ 9.50$.


## HELICHRYSUM

MONSTROSUM. $36,000 \mathrm{~S}$. The most popular double Strawflower Widely used for drying.


Prices above 8, each: tr. pkt., 25c; $1 / 4 \mathrm{oz} .40 \mathrm{c}$; 1 oz ., $\$ 1.40$

## HELIOTROPE

## 50,000 S.

Dwarf Regale Mixture. 15 in. A fine, even strain with extra large, lavender-violet flower heads. Richly fragrant. Tr. pkt., 40c; $1 / 4$ oz., \$1.00; 1 oz., $\$ 3.25$.
Marine. A fine new deep violet color and large flower heads. Tr. pkt., 50c; 146 oz ., $\$ 1.00 ; 1 / 4$ oz., $\$ 3.50$.
First Snow. (New-pictured left). Large, clear white flowers on bushy plants. Very fragrant, and unusually attractive.
Tr. pkt., 50c; $1 / 4$ oz., $\$ 1.50$; $1 \mathrm{oz} ., \$ 4.50$.

## HOLLYHOCK (Annual)

Indian Spring. 4 to 5 ft . Starts to bloom 5 months from seed sowing and continues until frost. Semi-double, light pink and rose flowers are borne mostly on central spike.
Tr. pkt., 25c; 1/4 oz., 60c; 1 oz., \$1.90.
Indian Summer. Contains a wide range of colors, with all the beauty of the perennial type. Blooms first season from seed. Tr. pkt., 50c; $1 / 4$ oz., $\$ 1.50$; 1 oz., $\$ 4.50$.
Perennial Hollyhocks. See page 64 .

## HUNNEMANNIA

FUMARIAEFOLIA (Bush Escholtzia). 8000 S.

- Sunlite. Brilliant canary-yellow, semi-double. Tr. pkt., 25c; $1 / 4 \mathrm{oz}, 50 \mathrm{c}$; 1 oz., $\$ 1.75$.

Hardy Iberis. See page 64.

## IMPATIENS - "Sultanas"

$66,000 \mathrm{~S}$. One of our most valuable plants for bedding under shady conditions; also widely used for winter and spring pot plants.

## DWARF IMPATIENS

- Sultani Dwarf Bright Orange. Very uniform, extra dwarf, flat, spreading growth. This is an outstanding bright shade of orange and should sell very readily as a bedding subject for shade. Similar to European strains of Beauty of Klettgau, but our trials indicate it is superior in uniform dwarf habit.
Sultani Dwarf Bright Rose. Actual color is deep bright rose. Compact and free flowering.
Sultani Dwarf Mixture. Bright mixture of dwarf varieties including above colors and other shades.
Prices above 3, each:
Tr. pkt., \$1.25; 1/32 oz., \$2.00; 1/tr oz., \$3.75.

TALL. 8 to 12 inches.
Holsti Salmon-Rose. (New.)
Holsti Autumn Glow. Brilliant orange-scarlet flowers.
Prices above 2, each:
Tr. pkt., $\$ 1.50 ; 1 / 32$ oz., $\$ 3.00 ; 1 / 16$ oz., $\$ 5.75$.
Holsti Hybrids Mixed. Bright mixture of pink, rose, salmon, orange, red, orchid and purple shades.
Tr. pkt., 50c; $1 / 16 \mathrm{oz}$., $\$ 1.10 ; 1 / 8 \mathrm{oz}$., $\$ 2.00$.
Ipomoea. See Morning Glory, page 38; and Moonflower, page 34.

## KALANCHOE

$2,240,000 \mathrm{~S}$. One of the showiest winter pot plants and one that holds up well in the home. While they flower normally in January and February, they may be had in bloom for Christmas from a January sowing, if shaded for about 4 weeks starting late August.


KALANCHOE TOM THUMB

- Brilliant Star. A fine pot plant, producing flowers three times the size of the common varieties and of a brighter, fiery red color.
Tr. pkt., \$1.00; 1/128 oz., \$2.10; 1/64 oz., \$3.85; 1/32 oz., \$7.00.
- Tom Thumb. Produces perfectly rounded, symmetrical plants literally covered with small bright scarlet flowers. A January or February sowing will provide fine 4 - or 5 -inch specimens for next winter's sales. Ours is the original true-to-name strain of this popular variety.
Tr. pkt., \$1.50; 1/128 oz., $\$ 3.00 ; 1 / 64$ oz., $\quad \$ 5.50$; $1 / 32$ oz., $\$ 10.00$.


IMPATIENS DWARF BRIGHT ORANGE

## KOCHIA (Summer Cypress)

Childsii. 45,000 S. 24 in. Symmetrical oval plants stay green throughout the entire season.
Tr. pkt., $15 \mathrm{c} ; 1 \mathrm{oz} ., 50 \mathrm{c} ; 4$ ozs., $\$ 1.80$.

## LANTANA

1300 S. Very showy. One of the most satisfactory bedding subjects for areas where summer heat is excessive. Must be sown early with bottom heat.

Dwarf Hybrids Mixed. 12 in.
Tr. pkt., 25c; 1/4 oz., 60c; 1 oz., \$1.60.
Tall Hybrids Mixed. 30 in.
Tr. pkt., 25c; 1/4 oz., 60c; 1 oz., \$1.60.

## LARKSPUR

See page 35 .

## LAVATERA

Splendens, Loveliness. 4500 S. Hollyhock-like flowers of deep salmon-rose.
Tr. pkt., 25c; 1/4 oz., 50c; 1 oz., \$1.50.

## LEPTOSYNE

Golden Rosette. 18 in. Bright golden yellow double flowers. Tr. pkt., 30c; 1/4 oz., 70c; 1 oz., \$2.10.

## LINARIA

MAROCCANA (Miniature Snapdragon). $600,000 \mathrm{~S}$.
Northern Lights. An improved taller growing Linaria containing many new bright shades.
Tr. pkt., 40c; $1 / 4$ oz., $\$ 1.35$; 1 oz., \$4.00.

## FOR SHADE

Following subjects enjoy more or less shade. Recommendations of these plants to those of your customers who have a "shade problem" might result in some increased business in these items.

| Alyssum | Coleus | Exacum |
| :--- | :--- | :--- |
| Gloxinias | Impatiens | Lobelia |
| Pansies Salvia | Torenia |  |
| Fibrous Begonias |  | Tuberous Begonia |



LUPINE GIANT KING

## LOBELIA

$700,000 \mathrm{~S}$. For partially shaded locations and for plant combinations, Lobelias provide the brilliant blues lacking in most plants.

COMPACTA. 6 in. Of dwarf, compact habit.

- Blue Gown. Free flowering deep blue. Very fine.

Cambridge Blue. Very dwarf, light blue.

- Crystal Palace. Very dwarf deep blue with dark bronzy green foliage. A fine variety.
Mrs. Clibran Imp. Deep blue; white eye and light foliage.
White Lady. Clear glistening white.
Prices above 5, each: tr. pkt., 30c; $1 / 4 \mathrm{oz} ., 85 c$; $1 \mathrm{oz} ., \$ 3.25$.
Mixture of all colors in the compacta class.
Tr. pkt., 25c; $1 / 4 \mathrm{oz}$., 75c; 1 oz., \$2.25.
PENDULA. Of trailing or pendulous habit.
Hamburgia. Deep blue with dark green foliage.
Tr. pkt., 40c; 1/s oz., 90c; 1/4 oz., \$1.60.
Sapphire. Deep blue with white eye. Light green foliage.
Tr. pkt., 40c; 1/4 oz., \$1.00.
Perennial Lobelia. See page 65.


## LOVE APPLE

## $10,400 \mathrm{~S}$.

Orange Fruited (Solanum Aculeatissimum). 2 ft . Long, thorny branches of bright orange fruits about $1 \frac{1}{2}$ inches across. When dried makes colorful material for fall floral arrangements. Tr. pkt., 50c; 1/8 oz., \$1.75.
Red Fruited (Solanum Integrifolium). $2^{1} / 2 \mathrm{ft}$. Similar to the above but slightly taller, not thorny, and fruits shrivel some when dried. Tr. pkt., 50c; 1/3 oz., \$1.75.
Christmas Cherry. See page 25.
Christmas Pepper. See page 39.

## ANNUALS-Continued LUPINE

GIANT KING (Improved Hartwegi). 1300 S. Makes a nice spring cut-flower crop flowered in 3 -inch pots from a January sowing spaced close so as to flower one spike to a plant.

- Oxford Blue. Deep blue. Sky-Blue White Mixture Prices above 4, each: tr pkt., 25c; l oz., \$1.00; 4 ozs., $\$ 3.00$. Perennial Lupine. Polyphyllus, see page 65.
Lunaria. See page 65.


## MARIGOLD <br> See pages 36 and 37 .

## MARVEL OF PERU (Mirabilis Jalapa)

Mixture. 325 S. A uniform strain of old-fashioned "Four O'clocks." Fine range of bright colors. Tr. pkt., 20c; 1 oz., 40c.

## MESEMBRYANTHEMUM

Criniflorum (Livingstone Daisy). $100,000 \mathrm{~S}$. Spreading plants literally covered with $1-\mathrm{in}$. flowers in many attractive colors. Needs full sun. Tr. pkt., 50c; 1/4 oz., \$1.20; 1 oz., $\$ 3.60$.

## MICROSPERMA

Golden Tassel. 800,000 S. 9-in. plants, with foliage similar to that of a Chinese Primula, supporting upright-growing, trum-pet-shaped, bright chrome-yellow flowers 2 inches across.
Tr. pkt., 50c; 1/32 oz., \$1.50.

## MIGNONETTE

27,000 S. Sow in January for spring cutting; very fragrant.

- Ball Forcing Strain. 16 in. Earliest and whitest forcing variety. $1 / 2$ tr. pkt., 60c; tr. pkt., \$1.00; $1 / 1$ oz., $\$ 2.00$.
MACHET. 12 in. For summer bedding.
Golden Goliath


## Goliath Red

Prices above 2, each: tr. pkt., 20c; $1 / 4$ oz., 30c; 1 oz., $\$ 1.00$.

## MIMOSA

Pudica (Sensitive Plant). 4500 S. Leaves close when touched. Tr. pkt., 30c; 1/4 oz., 65c; 1 oz., $\$ 2.00$.

## MIMULUS

700,000 S.
Moschatus (Musk Plant). 6-inch plants with fragrant yellow flowers. Tr. pkt., 25c; 1/64 oz., \$1.00; 1/16 oz., \$3.60.
Tigrinus. Mixture of large flowers.
Tr. pkt., 25c; 1/32 oz., 75c; 1/s oz., \$2.70.

## MOONFLOWER (Ipomoea Noctiflora)

110 S. Large flowered, climbing, white Moonflower.

## Black-Seeded

White-Seeded
Prices above 2, each:
Tr. pkt., 20c; 1 oz., 45c; 4 ozs., \$1.50; 1 lb., \$4.00.

Mesembryanthemum Criniflorum


## Annual Larkspur

8,000 seeds per oz.
For Early Summer Cut Flowers Outdoors: If you failed to make an outdoor sowing last fall, good results can be had from a spring sowing-if you get your seed in the ground just as soon as the frost is out of it. Figure on 2 lbs . of seed to sow an acre or 1 oz . for 600 to 700 ft . of row, if seeds are sown about 1 inch apart. Height outdoors 2 to 3 ft .
Under Glass-Spring Flowering: For indoor growing, Larkspur is a nice crop to follow late Mums. Well started 3-inch banded or potted plants should be ready, and are produced by a December or January sowing. Space at least $12 \times 12 \mathrm{in}$. on ground; $10 \times 10 \mathrm{in}$. on raised beds should be ample. The after-Mum planting is generally started out cool, $45^{\circ}$ nights, increasing to $50^{\circ}$ or more with spring weather. Height indoors 4 to 5 ft .
Varieties: The newer Regals, Supremes and Super Majestics have largely improved most of the older Giant Imperials, being stronger growers with better flower spikes. If you're not familiar with them, we suggest that you confine the bulk of your planting to the " 7 Best" listed below.

## 7 BEST

This list is based on our greenhouse flowering trials. Generally strains which are found best under glass seem also best adapted to outdoor culture.

- Salmon Supreme. Medium salmon-rose; heavy, fully doukle spikes.
- Dark Blue Supreme. Deep violet-blue; improves Blue Spire.
- Lilac Supreme. The best clear lavender; no orchid shading.
- White Supreme. The most vigorous white according to our trials.
- Regal Salmon-Pink. A shade lighter than Salmon Supreme. Very nice.
Prices above 5, each: tr. pkt., 40c; 1/2 oz., \$1.00; 1 oz., \$1.80; 4 ozs., \$6.00; 1 lb., \$18.00.
- Super Majestic Light Blue. An excellent light blue; outstanding.
- Giant Imperial Brilliant Rose. Deepest rose of all; fully double.
- 7 Best Mixture. Blended by formula from these 7 varieties. Prices above 3, each: tr. pkt., 30c; $1 / 2 \mathrm{oz} ., 90 \mathrm{c} ; 1 \mathrm{oz}$., \$1.60; 4 ozs., \$5.25; $1 \mathrm{lb} ., \$ 16.00$.
COLLECTION: One tr. pkt. each of above 7 varieties for \$2.35.


## GIANT IMPERIALS

## (Base Branching)

Blue Bell. Shades of light blue.
Blue Spire. Good violet-purple.

- Brilliant Rose. See 7 Best, above.

Exquisite Pink Imp. Fine medium pink.
Lilac King. Orchid-lavender.
Lilac Queen. Lavender-mauve.
Los Angeles Imp. Salmon-rose.

- Rosalind. Vigorous, medium pink.

Rosamond. Stock-flowered; deep rose.
Sweet Lavender. A good lavender.
White Cockade. Pure white.

- White King. Standard white.

Formula Mixture of Giant Imperials.
Prices above 13, each: tr. pkt., 30c; $1 / 2$ oz., 90c; 1 oz., $\$ 1.60$; 4 ozs., \$5.25; 1 lb., \$16.00.

## REGAL TYPE

Regal White. Fine, compact spikes

- Regal Rose. Rich deep rose with fine, heavy spikes and large, double florets.
- Regal Salmon-Pink. See 7 Best, above.

Prices above 3, each: tr. pkt., 40c; $1 / 2$ oz., $\$ 1.00$; 1 oz., $\$ 1.80$; 4 ozs., \$6.00; $1 \mathrm{lb} .$, \$18.00.


Lilac Supreme White Supreme Salmon Supreme Brilliant Rose

## SUPER MAJESTIC

Deep Salmon-Pink. Medium deep rose.

- Lavender. Beautiful lavender-mauve.
- Light Blue. See 7 Best at left.

Rose-Pink. Excellent deep rose.
Rosy Mauve. Rich dark lilac shade.

- White. Long-stemmed pure white.

Mixture of above and other colors.
Prices above 7, each: tr. pkt., 30c; $1 / 2$ oz., 90c; 1 oz., $\$ 1.60$; 4 ozs., \$5.25; 1 lb., \$16.00.

## SUPREMES

- Dark Blue Supreme. See 7 Best, above.
- Lilac Supreme. See 7 Best, above.

Rose Supreme. Clear deep rose.

- Salmon Supreme. See 7 Best, above.
- White Supreme. See 7 Best, above. Supreme Mixture. All Supreme colors.
Prices above 6, each: tr. pkt., 40c; $1 / 2$ oz., \$1.00; 1 oz., \$1.80; 4 ozs., \$6.00; 1 lb., \$18.00.


## HYACINTH-FLOWERED

Produces one long non-branching spike. For greenhouse use only.

| Dark Blue | Lavender | Pink |
| :--- | :--- | :--- |
| Purple | White | Mixed |

Prices above 6, each: tr. pkt., 50c; $1 / 4 \mathrm{oz} ., \$ 1.00 ; 1 \mathrm{oz}$, , $\$ 3.00$; 4 ozs., \$10.00.


CUPID ORANGE


CUPID YELLOW


COLOR MAGIC

## Dwarf

(9000 seeds per oz.)
These fine, uniform strains are among the most popular florist bedding plant subjects. Double varieties, such as Cupid, Spry, etc., are also valuable for combination boxes and pots.

## "SIX BEST" FOR BEDDING

- Spry. 10 in . Our most popular Marigold. Well known for its brightly contrasting golden yellow Anemone crest over deep rich mahogany guard petals. Dwarf and free flowering.
- Ball Dwarf Harmony. 10 in. Similar to Spry, except for color which is bright orange rather than yellow. Very rich effective color combination-deep maroon guard petals.
- Butterball. 8 in. Dwarfest Marigold in our trials. Light butter-yellow petals tipped wine-red. Guard petals also wine-red. Compact habit.
- Sunkist. 9 in. Uniformly dwarf and compact with solid, deep golden orange, Anemone type flowers about an inch in diameter.
- Yellow Pygmy. 10 in . Excellent very free flowering dwarf Marigold, 6 to 8 in . Double lemon-yellow and practically $100 \%$ true.
- Scarlet Glow. 12 in. Bright bronzy red, double flowers $1 \frac{1}{2}$ to 2 inches across are borne on dwarf plants.
- 6 Best Dwarf Mixed. Our own carefully balanced mixture of the above six. Prices above 7, each: tr. pkt., 30c; 1/4 oz., 55c; 1 oz., $\$ 1.85 ; 4$ ozs., $\$ 6.00$.

OTHER BEDDING VARIETIES

## Doubles

## CUPID MARIGOLDS

A combination of large flowers and dwarf habit, an entirely new dwarf Marigold. Extremely uniform, these compact, odorless, bushy plants produce blooms of startling size - up to $21 / 2$ inches, of Chrysanthemum-like quality. The plant breaks freely, retaining this ideal compact habit throughout the season. Ideal for edging, or any location where uniformity of habit is important. Excellent for combination planting. Cupid reaches 10 inches in open beds, but will bloom at a height of 4 to 6 inches in 3 -inch pots.

- Cupid Orange. Bright orange. Pictured at left above.
- Cupid Yellow. Bright creamy yellow. Pictured at left.

Cupid Gold. (New.) Midway between Cupid Yellow and Orange in color.

- Cupid Mixed. Formula mix of above 3 colors.

Prices above 4, each: tr. pkt., 50c; 1/8 oz., 90c; 1/4 oz., \$1.75; $1 \mathrm{oz} ., \$ 5.00$.

- Color Magic. (Below, left.) Bushy growing plants, similar to the popular Spry, but with fully double, $11 / 2$-inch flowers in rich shades of yellow and orange irregularly marked dark red. Color changes as season progresses. Here is a Marigold which combines an excellent name, a dwarf, salable habit, and real bright "eye appeal." Should be on every bedding plant grower's list. Tr. pkt., 35c; $1 / 4 \mathrm{oz} ., \mathrm{\$ 1.00} ; 1 \mathrm{oz} ., \$ 3.00$.
Harmony Hybrids. An excellent mixture of colors in this dwarf double type.
Tr. pkt., 25c; 1/4 oz., 50c; 1 oz., \$1.75; 4 ozs., $\$ 5.00$.
- Lemon Drop. Dwarf, compact plants with medium small, fully double, lemon-yellow flowers. Considered by many an improvement over Yellow Pygmy.
Tr. pkt., 40c; $1 / 4 \mathrm{oz}$., \$1.25; 1 oz ., \$3.75.
Golden Harmony. 17 in . Very similar to Harmony in flower type and habit but a solid bright golden yellow.
Harmony. 14 in. Attractive Anemone type flowers; orange crest and maroon guard petals.
Melody. 12 in . A solid clear brilliant orange Anemone-flowered type.
Pot O' Gold. 15 in . Deep orange. Large flowers loosely formed with full centers and broad, overlapping petals. Flowers continuously in warmest weather.
Primrose (Improved Pallida). 12 in . Dwarf plants with fully double flowers an inch in diameter. Color is a rich golden yellow.
Robert Beist. 13 in. Dwarf double, deep rich mahogany-red. Nice
Royal Scot. 18 in. Fully double flowers striped gold and mahogany
Dwarf French Double Mixed. Mixture of dwarf double sorts. A little tall: good color balance.
Prices above 8, each: tr. pkt., 25c; 1/4 oz., 50c; 1 oz., \$1.75.
Rusty Red. 13 in . Large, rust-red, fully double flowers, 2 inches across, are freely borne on medium dwarf plants. Try this in place of Robert Beist.
Tangerine. 13 in .2 -inch double flowers of bright tangerine-orange.
Prices above 2, each: tr. pkt., $35 \mathrm{c} ; 1 / 4$ oz., $\$ 1.00$; 1 oz., $\$ 3.00$.


## Single Varieties

- Naughty Marietta. 16 in. An improved Legion of Honor. Semi-dwarf, bushy plants with finely netted leaves. Freely produces 2 -inch, single, golden yellow flowers, each with an attractive dark red eye.
Tr. pkt., 25c; 1/4 oz., 50c; 1 oz., $\$ 1.75$; 4 ozs., $\$ 5.50$.
DWARF MARIGOLDS-Continued
$10,000 \mathrm{~S}$. Most any grower will find a spring crop of cut-flower Marigolds quite profitable. A January or February sowing, spaced about $4 \times 5$ inches and grown single stem, will flower April and May. The All-Doubles and Carnation-Flowered types are most popular, but be sure and include some of the Chrysanthemum-flowered Mission Giants for their excellent novelty value.


## FIVE BEST FOR CUTTING

- Ball Giant Orange. Similar in type to All-Double Orange but somewhat larger flowered and of a more uniform deep, bright orange color.
- All-Double Orange. This belongs to the Fistulosa or large flowered, solid quilled-petal type. Nearly $100 \%$ double. An excellent, long-stemmed cut-flower strain.
- All-Double Lemon. Identical to the above, but a clear lemonyellow.
- Gold Improved. Odorless. The popular Carnation-flowered intense orange. Excellent for greenhouse forcing.
- Yellow Supreme. Odorless. Similar to Gold Improved but with flowers a rich creamy yellow.
- Five Best Cutting Mixture. Our own carefully compounded formula mixture of the foregoing varieties balanced according to their commercial value.
Prices last 6, each tr. pkt., 30c; $1 / 4 \mathrm{oz} ., 55 \mathrm{c} ; 1 \mathrm{oz}$. , $\$ 1.75$; 4 ozs., $\$ 6.00$.

ALL-DOUBLE LEMON ( $\ddagger$ op) ALL-DOUBLE ORANGE (below)


## OTHER CUT-FLOWER VARIETIES

Guinea Goid. A Carnation-flowered golden orange; longstemmed. Freely produces loosely-petalled 3 -inch flowers.
Frills. Odorless. 18 in . Large flowered golden orange with petals attractively frilled and waved. Very graceful appearance.
Real Gold. A golden yellow Carnation-flowered Marigold. Color between Gold Improved and Yellow Supreme. Odorless. Sunset Giants. An extra large, long-stemmed Carnation-flowered strain. Ranges from lemon to deep orange.
All-Double Mixture. A mixture of All-Double Orange and Lemon, with some intermediate shades.
Prices above 5 , each: tr. pkt., 30c; $1 / 4 \mathrm{oz} ., 55 \mathrm{c} ; 1 \mathrm{oz}, \mathbf{\$ 1 . 7 5}$; 4 ozs., \$6.00.
Fluffy Ruffles. 24 in. Giant, ruffled flowers of bright orange. Tr. pkt., 35c; $1 / 4 \mathrm{oz}$., $\$ 1.00 ; 1 \mathrm{oz}$., $\$ 3.00$.
Odorless Carnation-Flowered Mixture. Ranges in color from deep orange to light yellow. Carnation-flowered. Tr. pkt., 30c; $1 / 4 \mathrm{oz}$, , 55 c ; 1 oz., $\$ 1.65$; 4 ozs., $\$ 5.50$.

## Chrysanthemum-Flowered Types

Produces almost perfect ball-shaped, Chrysanthemum-like blooms about 3 inches in diameter. Exceptionally vigorous and free branching in growth.

- Glitters. Large, Chrysanthemum-like flowers of soft golden yellow on long, strong stems. Long blooming period. Tr. pkt., 35c; $1 / 4 \mathrm{oz} ., \$ 1.00$; 1 oz ., $\$ 3.00$.
- Happiness. 16 in. Early, and blooms very profusely with $21 / 2$ in. 'Mum-type flowers of rich golden yellow produced throughout the summer. Height 16 to 18 in .
Tr. pkt., 40c; $1 / 4 \mathrm{oz}$., 75 c ; 1 oz ., $\$ 2.50$.
- Mammoth Mum. The largest of the Chrysanthemum-flowered Marigolds. Light sulphur-yellow. Tr. pkt., 40c; $1 / 4 \mathrm{oz} ., 90 \mathrm{c}$; $1 \mathrm{oz} ., \$ 3.00$.
Limelight. 20 in . Primrose-yellow.
Tr. pkt., 30; $1 / 40$ oz., $55 \mathrm{c} ; 1$ oz., $\$ 1.75$; 4 ozs., $\$ 6.00$.
Goldsmith (Mission Giant). A very attractive light golden orange in this popular class.
Tr. pkt., 35c; $1 / 4 \mathrm{oz}$., 75 c ; 1 oz ., $\$ 2.50$.
Yellowstone (Mission Giant). Same as above but a pleasing clear yellow. Tr. pkt., 35c; $1 / 4 \mathrm{oz} ., 75 \mathrm{c} ; 1 \mathrm{oz}$., $\$ 2.50$.
Mission Giant Mixed. A well-balanced mixture in this new type; ranges from deep orange to light yellow. Tr. pkt., 30c; $1 / 4$ oz., 55 c ; 1 oz., \$1.75; 4 ozs., \$6.00.


## Winter Flowering

This class is for winter flowering from a fall sowing and will not flower during summer.

- Colorado Sunshine. Loosely formed, double, 3-4 inch, butter-yellow, Carnation-flowered. Classed as a winter flowering variety, but it is also fine for outdoor culture. Tr. pkt., 50c; 1/4 oz., \$1.50; 1 oz., \$4.50.
Lieb's Brown and Gold. Golden crest, mahogany guard petals.
Lieb's Winter Sunshine. Solid golden yellow.
Golden Trumpet. Odorless. Pure yellow; outer petals are bell-shaped.
Prices above 3, each: tr. pkt., 35c; 1/4 oz., 80c; 1 oz., $\$ 2.40$.


## Dwarf Single Varieties, Continued

Firecross. 14 in. Dwarf single. Orange with brown center. Colorful.

- Flash. 14 in. Single mahogany flowers with golden yellow margins are freely produced on medium dwarf plants.
Red Head, 12 in. A fairly dwarf Anemone-flowered variety with orange crest, tipped maroon, and copper-red to mahogany guard petals.
Prices above 3, each: tr. pkt., 25c; $1 / 4$ oz., 50c; 1 oz., $\$ 1.75$.
Sunny. Similar to Naughty Marietta, but with single, clear yellow flowers.
yellow flowers.
Tr. pkt., 30c; $1 / 40 \mathrm{z} ., 55 \mathrm{c} ; 1 \mathrm{oz} ., \$ 1.85 ; 4$ ozs., $\$ 6.00$.

DWARF BUSH.
Gnome (Little Giant Improved). Ball-shaped plants with fernlike foliage. Plants are covered with small, single, bright yellow, orange-eyed flowers.
Tr. pkt., 25c; 1/4 oz., 50c; 1 oz., \$1.75.

- Ursula. Dense, rounded, free flowering plants with fine, lacy foliage. "/3-inch, single, 5-petaled, golden orange flowers with deeper center. Foliage has a pleasant, lemon-like odor. Very attractive.
- Lulu. Same as above, but flowers are lemon-yellow.

Prices above 2, each: tr. pkt., 40c; $1 / 4$ oz., \$1.20; 1 oz., \$3.60.


MORNING GLORY CANDY PINK
A fine new color in this important subject.

## MORNING GLORY (Ipomoea)

650 S . These vines are easily grown and most varieties are profuse bloomers, if grown in soil of low fertility and not overwatered. Sow in late winter for banded or potted plants for spring bedding sales.

## CANDY PINK

(New.) Large, clear pink flowers-a new and unusual color in Morning Glories. Plants are somewhat shorter and more spreading than most varieties. Pictured above.
Tr. pkt., $35 \mathrm{c} ; 1 / 4 \mathrm{oz}$., $\$ 1.00 ; 1 \mathrm{oz}$, $\$ 3.00$.

- Crimson Rambler. B-ight crimson-red flowers with white throats are freely produced on vigorous vines. Flowers are somewhat smaller than the following 2 varieties.
Tr. pkt., 20c; $1 / 4 \mathrm{oz}$, 30c; 1 oz., 90c.
- Pearly Gates. A fine, clear white Morning Glory with slight cream shading in throat.
Tr. pkt., 25c; $1 / 4$ oz., 50c; 1 oz., $\$ 1.65 ; 4$ ozs., $\$ 5.50$.
- Heavenly Blue. Clark's Mammoth Early Free Flowering Strain. The popular bright blue shade that is a solid sheet of vivid color all summer. Can be forced into flower for spring sales in 3- or 4 -in. pots from a sowing made 8 to 10 weeks previously. Tr. pkt., 20c; 1 oz., 75 c; 4 ozs., \$2.25.
Blue Star. Light blue with mid-blue stripes radiating from throat to petal tips. Tr. pkt., 40c; 1/4 oz., 80c; $1 \mathrm{oz} ., \$ 2.40$.
Cornell. Bright red with white edge.
Tr. pkt., 25c; $1 / 4$ oz., 50c; 1 oz., $\$ 1.65$.
- Scarlett O'Hara. 650 S . Vivid crimson-scarlet. Improved climbing strain.
Tr. pkt., 20c; 1/4 oz., 45c; 1 oz., \$1.25.


## MYOSOTIS (Forget-Me-Not) $44,000 \mathrm{~S}$.

- Ball Early. Free flowering, spring blooming plants of this always popular bright blue flower can be had from a sowing made in December or January. This should not be confused with the other types listed with the perennials. Tr. pkt., 35c; $1 / 4 \mathrm{oz}$., \$1.00; 1 oz., $\$ 3.25$.
Hardy Myosotis. See page 65 .


## NAEGELIA (Temple Bells) <br> $1,500,000 \mathrm{~S}$

Art Shades. Dwarf plants with Gloxinia-like leaves and clusters of slender, tubular flowers in shades of pink, red, yellow and orange; all with spotted throats. This showy pot plant requires the same culture as Gloxinias. Tr. pkt., \$1.50.

## NICOTIANA (Flowering Tobacco)

Showy plants with a pleasing evening fragrance.

- Orange Blossom (Suaveolens). $210,000 \mathrm{~S} .18 \mathrm{in}$. A dwarf and compact small-flowered white. Tr. pkt., 30c; $1 / 16$ oz., 85c.
AFFINIS. $400,000 \mathrm{~S}$.
- Crimson Bedder. 15 in . Compact, very free flowering. Deep crimson-red. Tr. pkt., 30c; $1 / 4$ oz., 60c; 1 oz., $\$ 2.00$.
White. 3 ft . Large flowered. Tr. pkt., 20c; 1 oz , 75c.


## - SENSATION MIXED

(Daylight Strain). 24 in . The flowers of these new Nicotiana hybrids have the unique feature of remaining open all day, even in brilliant sunshine. They have the same delightful evening scent as the older types, while the colors range from white through many shades of cream and pink to purple and deep crimson. Plants are bushy in habit, ideal for bedding. Tr. pkt., 40c; $1 / 4 \mathrm{oz} ., \$ 1.00 ; 1 \mathrm{oz}$., $\$ 3.25$.

## NIGELLA

Miss Jekyll (Love-in-a-Mist). 11,000 S. Cornflower-blue.
Tr. pkt., 30c; l oz., \$1.20.

## PANSY

See pages 40 and 41 .

## PASSIFLORA

Coerulea (Passion Flower). Greenhouse climber with large, blue flowers surmounted by a purple and white crown.
Tr. pkt., 40c; $1 / 8$ oz., 90c; $1 / 4 \mathrm{oz}$., $\$ 1.65$; 1 oz ., $\$ 5.00$.

## PENTSTEMON (Beard Tongue)

Sensation Mixture. 55,000 S. 2 ft . Attractive bell-shaped flowers produced on good spikes in an exceptional range of colors. Much used for bedding or in borders. Used as an annual or perennial.

Tr. pkt., 40c; $1 / 4 \mathrm{oz} ., \$ 1.00$; 1 oz., $\$ 3.25$.

## PEPPER, CHRISTMAS (Capsicum)

9,000 S. Sow April to June and carry along indoors for Christmas. Ball Christmas Pepper. Compact plants with a profusion of cone-shaped fruit that is first green, later turning purple and then red. Tr. pkt., 50c; $1 / 4 \mathrm{oz}$., $\$ 1.50$; 1 oz., $\$ 4.75$.

- Candle Pepper. (Craigi Christmas Pepper). Similar to Ball Christmas Pepper, but the plants are smaller leaved. Small fruit, very freely produced well above the foliage, turns from white to brilliant red. Tr. pkt., 50c; $1 / 4 \mathrm{oz}$., $\$ 1.50$; $1 \mathrm{oz} ., \$ 4.75$.
Cherry, Christmas. See page 25.
Love Apple. See page 34.


## PETUNIAS

See pages 4 to 13 .

## PHLOX DRUMMONDI

$14,000 \mathrm{~S}$. Annual Phlox are among our most showy bedding items and more popular today than ever before. This is one of the few native American flowers - was discovered by an Englishman named Drummond in 1835 on the plains of Texas. It stands heat well and rivals Petunias for showiness, having the added advantage of a dwarf, neat habit (Nana Compacta Global types) absent from most Petunias.

## - GLOBE MIXED

8 in. (New.) Pictured above. An important type of annual Phlox. Many bedding plant growers are now using Globe exclusively for mixed dwarf Phlox. Reason: beautifully rounded superior plant habit. Tr. pkt., 50c; 1/8 oz., \$1.50; 1/4 oz., \$2.65; 1 oz., $\$ 8.00$.

GRANDIFLORA. 15 to 18 in . Fine, free flowering bedding and border material. Also nice for cutting.

Chamois Rose. Light creamy pink with white center.


PHLOX GLOBE MIX
Coccinea. Crimson-red.
Isabellina. Light creamy yellow.
Rosea. Medium rose-pink.

- Violet. Try this with white or yellow. White. A clear, even white.
Prices last $\delta$, each: tr. pkt., 40c; $1 / 4$ oz., $80 \mathrm{c} ; 1 \mathrm{oz} ., \$ 2.50$.
- Special Mixture of all colors in this tall class.

Tr. pkt., 30c; $1 / 4 \mathrm{oz}$., 60c; 1 oz., $\$ 2.00$.

## - CUSPIDATA MIXTURE

(Star of Quedlinburg). A mixture of star-shaped flowers. Tr. pkt., 35 c ; $1 / 4 \mathrm{oz}$., 80 c ; $1 \mathrm{oz} ., \$ 3.00$.

GRANDIFLORA GIGANTEA. Somewhat stronger in growth and larger flowered than the above.
Red Glory. A bright red with large contrasting white eye.
Rosy Morn. A particularly bright, clear rose-pink with large white eye.
Salmon Glory. Rich, soft salmon with white eye.

- Art Shades Mixture. Mixture of pastel shades; white eyes.

Prices above 4, each: tr. pkt., 45c; 1/4 oz., \$1.10;1 oz., \$3.30.
NANA COMPACTA. $19,000 \mathrm{~S} .6$ to 8 in . Of dwarf, compact growth, fine for low bedding and border work.

- Fireball. A real fiery scarlet.

Sky Blue. Clear soft blue with white eye.
Snowball. Good clear white.
Salmon Rose. (Formerly Chamois). A warm, rich color. Apricot. Deeper than Isabellina.
Violet. An attractive, rich color.
Prices above 6, each: tr. pkt., 45c; $1 / \pm 0$ z., $\$ 1.10 ; 1 \mathrm{oz}, \$ 3.30$.

- Mixture. Dwarf mix.

Tr. pkt., $35 \mathrm{c} ; 1 / 4 \mathrm{oz}, \mathrm{N}$ \$1.00; 1 oz ., $\$ 3.00$.
Beauty Mixed (Sutton's). A compact and very free flowering strain with large blooms. Excellent for pot plants, combinations or bedding. Tr. pkt., 45c; $1 / 4 \mathrm{oz}$., $\$ 1.10$; 1 oz ., $\$ 3.30$.
Cecily Mixed. A very popular semi-dwarf mixture. Tr. pkt., 35c; $1 / 4$ oz., $\$ 1.00$; l oz., $\$ 3.00$.
Pinks. See Dianthus, pages 30 and 61.

- Ideal Bedding (Masterblend). 6 to 8 in . This new florist strain is exceptionally uniform in its dwarf habit. An unusually bright mixture of colors well adapted for pot and combination work or for borders.
Tr. pkt.. 75c; $1 / 4 \mathrm{oz}$., $\$ 2.00 ; 1,2 \mathrm{oz} ., \$ 3.50 ; 1 \mathrm{oz}$., $\$ 6.00$.


ROGGLI GIANT ELITE MIX
In comparative trials the world over, this unique Swiss grown Pansy strain almost invariably takes top honors for petal substance, deep rich colors, flower size and uniform dwarf growth habit.

America. An exceptionally free flowering mixture with medium sized bloom. Dwarf and extra early.
Tr. pkt.. 65c; 1/t oz., \$2.75; 1 oz., \$10.00.

- Ball Giant Mixture Dwarf Strain. A fine Swiss Giant strain selected for dwarf and compact habit. Tr. pkt., 65c; 1/8 oz., \$1.40; $1 / 4 \mathrm{oz}$. . $\$ 2.75$; $1 \mathrm{oz} ., \$ 9.00$; 4 ozs., $\$ 32.00$. Ball Winter Flowering. A tall growing winter cut-flower variety; at its best from a late summer sowing. Not for bedding.
$1 / 2$ tr. pkt., 65c; tr. pkt., \$1.10; 1/8 oz., \$2.75; 1⁄2 oz., \$5.00.
- Color Carnival. (New.) A remarkable American produced strain of Swiss Giants. Our trials indicate that it is fully equal-and in some respects superior--to best imported Roggli strain. Large flowers in a superb mixture of colors. Sent out as trials last year labeled "Special Giant Mix."
Tr. pkt., $\$ 1.50 ; 1 / 8$ oz., $\$ 3.75 ; 1 / 4$ oz., $\$ 7.00 ; 1 \mathrm{oz}$., $\$ 22.00$.
- Englemann's Giant Mixture. A large flowered and brightly colored strain, many being penciled or veined. Fairly compact growth. We offer originator's seed only.
Tr. pkt., \$1.00; $1 / 4 \mathrm{oz},. \$ 4.00 ; 1 \mathrm{oz} ., \$ 14.00$.
Geneva Giants. A taller, vigorous growing American strain of Swiss Giants. Tr. pkt., 85c; 1/4 oz., $\$ 3.00 ; 1$ oz., $\$ 10.00$. Improved Swiss Giants. Predominates in rich bronze and red shades. Tr. pkt., 65c; 1/4 oz., \$2.75; 1 oz., \$9.00.
"101" Giant Mixture. A choice bedding and basket Pansy of the "English" type. Large flowers in a wide color range on compact plants.
Tr. pkt., 75 c ; $1 / \mathrm{s}$ oz., $\$ 2.00$; $1 / 4 \mathrm{oz} ., \$ 3.50 ; 1 \mathrm{oz} ., \$ 12.00$. Maple Leaf Giants. An excellent, extra large flowered strain. Heavy growth with good stems.
Tr. pkt., 65c; 1/s oz., \$1.65; 1/4 oz., \$3.00; $1 \mathrm{oz} ., \$ 10.00$. Oregon Giants. A complete mixture of long-stemmed, large flowered Giant Ruffled Pansies. Originator's seed. 200 seeds, 50c; 600 seeds, $\$ 1.25$; $1 / 4$ oz., $\$ 4.00$; 1 oz., $\$ 12.00$. Butterfly Hybrids. Ruffled $21 / 2-3 \mathrm{in}$. flowers, including unusual apricot, terra cotta and rosy orchid shades, are freely produced on vigorous plants. Originator's seed only. Tr. pkt., $\$ 1.25$; $1 / 8$ oz., $\$ 3.35$; $1 / 4$ oz., $\$ 5.60$; $1 / 2$ oz., $\$ 9.75$; 1 oz., \$17.75.
- Ruffled Rainbow. (Pictured at right). An unusually uni form dwarf mixture characterized by medium large flowers with distinctly ruffled petals and a wide range of colors. Tr. pkt., \$1.00; $1 / 8 \mathrm{oz} ., \$ 2.75$; $1 / 4 \mathrm{oz} ., \$ 5.00 ; 1 \mathrm{oz}$., $\$ 15.00$.


## Prafitable

$25,000 \mathrm{~S}$. There are two basic schedules for growing Pansies for bedding plant sales:
Midwinter Sowing in December or January. After they have germinated carry them along as cool as possible till spring-transplant them into frames in March (Chicago latitude) for May sales. Carl Hellgren, Glenbard Gardens, Lombard, Ill., sows early December, transplants 30 to a "half flat", and carries them in a cold house $35-40^{\circ}$ till March 1. Then he sets them out in frames where they start to bloom early May and are sold for $\$ 1.50$ per flat.
Summer Sowing. (Early August.) This is the most popular time for establishing plants which are spaced about $4 \times 6$ in. in frames, given some protection over winter-loose straw, perhaps. Plants should be well established before winter sets in-even budded so that blooms will be available early in the spring to help sell the plants.

## 'FOUR BEST"

- Ball Giant Mixture. This is our finest and most popular bedding Pansy mixture. We blend this ourselves, using the best available strains of Swiss Giants, adding separate varieties to insure a good balance of colors.
Tr. pkt., $85 \mathrm{c} ; 1 / 8$ oz., $\$ 1.65$; $1 / 4$ oz., $\$ 3.00 ; 1$ oz., $\$ 10.00$; 4 ozs.. \$36.00.
- Canadian Giants. This selection from Maple Leaf Giants contains some of the largest flowers in Pansies.
Tr. pkt., \$1.00; $1 / \frac{1 / \text { oz., }}{}$ \$1.85; $1 / 4$ oz., $\$ 3.30 ; 1$ oz., $\$ 11.00$.
- Roggli Giant Elite Mix. (Pictured at left.) A choice Swiss bedding strain, predominating in rich red and bronze shades with the typical, large, deep blotches. The finest large flowered Pansy. We supply originator's imported seed only. Tr. pkt., \$1.50; $1 / 8$ oz., $\$ 3.75$; $1 / 4$ oz., $\$ 7.00$; 1 oz., $\$ 22.00$.
- Steele's Jumbo Mixture. We handle the originator's seed of this popular American strain.
Tr. pkt., \$1.25; $1 / 8$ oz., $\$ 3.35$; $1 / 4$ oz., $\$ 5.60$; $1 / 2$ oz., $\$ 9.75$; $1 \mathrm{oz}, \mathrm{S} 17.75$.


## RUFFLED RAINBOW



## Panded



- Felix. Uniformly true to type, with well ruffled flowers of good size carried on fairly dwarf plants. Colors are rich and unusual-including purple, apricot and wine shades together with pastel bronzes and smoky tones difficult to describe. Each flower is marked with the dark "whiskers" characteristic of this strain and the over-all effect is indeed striking. Tr. pkt., \$1.00; 1/8 oz., \$2.20; 1/4 oz., \$4.00; 1 oz, , \$12.00.
(T)Tigress. "Miniature Pansies." The flowers of this European novelty are produced in great abundance, and the effect is most unusual. Reds, yellows, orchids and purples in novel striped and blotched arrangements of at least 3 colors create a striking appearance. This also has a very distinct and fine fragrance. Tr. pkt., 50c; $1 / 4$ oz., \$1.75; 1 oz., \$5.00.


## SEPARATE COLORS

Alpenglow. Mahogany with dark center.
Berna. Dark velvety blue.

- Coronation Gold. The finest, clear golden yellow. Delft Blue. Porcelain-blue; a prized and unusual Pansy color. Flowers rather small. Particularly free flowering. Firebeacon. Bright, flaming orange with dark center. Giant Orange. Light orange; similar in color to Viola Apricot.
Jet Black. $80 \%$ of the flowers are a true black thruout the spring, the purple undertone not becoming apparent until hot weather. Unusual grown with white Pansies.

MONT BLANC
ALPENGLOW


LAKE OF THUN



TIGRESS


CORONATION GOLD


RASPBERRY ROSE


RHINEGOLD

- Lake of Thun. Large flowered blue with darker center. Mont Blanc. Ivory-white with small yellow eye.
- Raspberry Rose. Soft raspberry-pink with velvety blotch. Redwing. Red and yellow petals, dark center. Originator's seed.
Rhinegold. Large flowered yellow with dark center. Prices last 12, each:
Tr. pkt., 80c; $1 / 8$ oz., $\$ 2.00$; $1 / 4 \mathrm{oz} ., \$ 3.50$; 1 oz., $\$ 11.00$.
Paper White. A pure white, rather than the ivory shade of Mont Blanc, with small yellow eye. Very outstanding in our trials.
Tr. pkt., \$1.00; $1 / 8$ oz., $\$ 3.00$; $1 / 4$ oz., $\$ 5.00$; 1 oz., $\$ 18.00$. Pay Dirt. (New.) Large yellow with black lines. Orig. seed. $1 / 46$ oz., $\$ 3.00 ; 1 / 8$ oz., $\$ 5.00 ; 1 / 4 \mathrm{oz} ., \$ 9.00$.
Blue Butterfly. Blue and white. An improved Lord Beaconsfield.
Tr. pkt., $\$ 1.00$; $1 / \mathrm{s}$ oz., $\$ 2.75$; $1 / 4 \mathrm{oz}$., $\$ 5.00$; 1 oz., $\$ 15.00$. Redskin. Solid dark red.
Tr. pkt., \$1.00; 1/8 oz., \$3.00; 1/4 oz.. \$5.00; 1 oz., \$18.00.


## Originator's Separate Colors

We have definitely proved by thorough comparative flowering trials at West Chicago the general superiority of these originator-grown Swiss Giant Pansies. For flower size, uniformity of color and habit, they are the finest separate color Pansies available.

- Eiger (Rhinegold).
- Hohenfeuer (Firebeacon).

Blumlisalp (Raspberry Rose).
Berna, Originator's.
Alpengluhn (Alpenglow).
Jungfrau White.
Monch (Coronation Gold).

- Thunersee (Lake of Thun).
- Roggli Giant Elite Mix (See 4 best, opposite page).
- Roggli Straight Color Mix. Our own mixture of the above Roggli separate colors, blended by formula.
Prices above 10 varieties, each:
Tr pkt., \$1.50; 1/8 oz., \$3.75; 1/4 oz., \$7.00; 1 oz., \$22.00.


PORTULACA DOUBLE MIXTURE
PORTULACA (Moss Rose)
280,000 S. Very excellent, easily grown outdoor bedding plant. Will flower 30 to 45 days from sowing in late spring or early summer.

Single Mixture. Tr. pkt., 25c; $1 / 40$ oz., 70c; 1 oz., $\$ 2.35$.

## - DOUBLE MIXTURE

Pictured above. This is an unusually choice and wonderfully showy mixture of brilliant colors. Produces 85 to $90 \%$ true double flowers.
Tr. pkt., 30c; $1 / 4$ oz., \$1.25; 1 oz., \$3.75.

Single Jewel. Extra large flowers of glowing crimson.
Tr. pkt., 50c; $1 / 8 \mathrm{oz}$., $\$ 1.00$; $1 / 4 \mathrm{oz}$., $\$ 1.80$; 1 oz ., $\$ 5.50$.

## PLUMBAGO

Capensis, Blue. 2000 S. $11 / 2$-inch flowers of clear azure-blue are borne on terminal spikes. 100 seeds, 90 c; 1000 seeds, $\$ 8.00$. Capensis, White. Same as Capensis Blue except for color. 100 seeds, 90 c; 1000 seeds, $\$ 8.00$.

## POPPY

ICELAND (P. Nudicaule). $275,000 \mathrm{~S}$. The standard type for spring greenhouse forcing. Sow direct either in beds or pots. - Sandford's Giants. A fine, brilliantly colored mixture.

Tr. pkt., 35c; 1/4 oz., \$1.25; 1 oz., \$3.75.
SHIRLEY (P. Rhoeas). $70,000 \mathrm{~S}$.
Formula Mixture of all colors. Tr. pkt., 30c; 1 oz., 90c.
Double Mixed. Tr. pkt., 25c; 1/4 oz., 75c; 1 oz., \$2.25.
Oriental Poppies. See page 66.

## PRIMULA MALACOIDES

12,000 seeds per $1 / 32$ oz. Seed may be sown from May until October for spring blooming in various sizes.
Brightness E[EHYBRiD] (New.) The first $F_{1}$ Hybrid Primula ever offered! Flowers are a rich, luminous, deep rose and, as observed in our trials, Brightness was "head and shoulders" above any other variety in uniformity, vigor and profusion of blooms. A genuinely outstanding Primula. Tr. pkt., \$1.25.

- No. 32 Glory of Riverside Imp. An excellent variety with freely produced beautiful salmon-rose flowers.
No. 41 White Giant. Fine, pure white; large flowers and heavy stems.


## ANNUALS-Continued

## PRIMULA MALACOIDES, Continued

No. 43 Brilliancy Imp. Large flowers of rich wine-red.

- No. 51 Mrs. Eriksson of Riverside. Large flowers of glowing rose-red on compact plants of medium height.
No. 62 Ball Lavender. Bright orchid-lavender.
No. 50 Mixture. Our own balanced formula mixture.
Prices last 6, each: tr. pkt., \$1.25; $1 / 64 \mathrm{oz} ., \$ 2.75 ; 1 / 32 \mathrm{oz}$, $\$ 5.25$.
- No. 64 Red Velvet. Newly opened flowers are a bright coralrose changing to deep, velvety crimson-red as they mature. Tr. pkt., \$1.50; 1/128 oz., \$2.50.


## DOUBLE MALACOIDES.

Fairy Jewels. Double pink.
Tr. pkt. (1000 seeds), \$1.50; 1/128 oz., \$2.50.

## PRIMULA OBCONICA

4000 seeds per $1 / 32$ oz. The fact that this brightly colored, large flowered class of Primulas has maintained its popularity over a long period of time is proof of its real value as a pot plant. Sow from January on for Christmas and later. The following strains are produced by the world's leading specialists.

- Fasbender's Red. An outstanding fine, extra large flowered deep crimson-red.
Better Days. Deep, brilliant ruby-crimson.
Mohnstein's Red. (Atrosanguinea). Popular deep red.
- Mueller's Berlin Rose (Mueller's Rosea). Soft medium rose. Salmon-Rose (Lachsrosa). Salmon-rose shades.
Sky-Blue (Coerulea). Clear mid-blue.
Violet Blue. Deep violet.
White. Rather tall growth.
Wyaston Wonder. A special selection of this famous English variety. Vigorous growing, large flowered bright crimson.
- Formula Mixture. Carefully blended from above colors.

Prices last 10, each: tr. pkt., \$1.25; 1/64 oz., \$2.75; 1/32 oz., $\$ 5.00$.

## PRIMULA CHINENSIS (Chinese Primula)

18,000 S. A popular class with many retail growers. Very colorful and showy. Sow from March on for Christmas and later.

Kardinal. Vivid. intense orange.
Tr. pkt., \$1.50; $1 / 64$ oz., \$5.00.
Special Mixture. A choice assortment of colors. Tr. pkt., \$1.25; 1/32 oz., \$3.75.
Hardy Primulas. See page 66.

## QUEEN ANNE'S LACE FLOWER

36,500 S. 24 in . Large heads of lacy white flowers. Nice filler for basket work. Tr. pkt., 20c; $1 / 4 \mathrm{oz} ., 35 \mathrm{c} ; 1 \mathrm{oz} ., \$ 1.10$.

## RANUNCULUS

Giant Mixed. 57.000 S . Double flowers in shades of yellow. orange and red. Tr. pkt., 50c; 1/8 oz., \$1.10; 1/4 oz., \$1.90; 1 oz., \$6.00.

## RICINUS (Castor Bean)

Very fast growing, tall, large-leaved plants. Good for tall hedges and windbreaks.

Crimson Spire. 75 S. 8 ft . Bronzy red foliage with crimson stems and red fruit. 1 oz.. $45 \mathrm{c} ; 4 \mathrm{ozs} . . \$ 1.40 ; 1 \mathrm{lb} . . \$ 4.50$. Zanzibariensis Mixed. 25 S .10 ft . Foliage all green. $1 \mathrm{oz} ., 30 \mathrm{c}$; 4 ozs., $\$ 1.00$; $1 \mathrm{lb} ., \$ 3.00$.

## RUDBECKIA

$85,000 \mathrm{~S}$. A very free flowering bedding plant. Valuable for cutting.

- Starlight. The only Rudbeckia strain we have seen that actually produces fully double Dahlia-like flowers. An attractive mixture of yellow, orange and brown shades flowering on long stems; flower type ranges from nearly single to fully double.
Tr. pkt., 35c; 1/8 oz., \$1.00; 1/4 oz., \$1.75; 1 oz., \$5.25.


## SAINTPAULIA

## (African Violet)

11,500 seeds per $1 / 64 \mathrm{oz}$. Nice 3 -inch pots of this extremely popular plant can be grown from seed in 6 to 8 months, if care is exercised in germination. Handle about like Begonia seed. Uniform moisture, a $65^{\circ}$ temperature and protection from bright sun are necessary in growing good Saintpaulias.

Ionantha. Deep blue. Tr. pkt., \$1.50.

- Blue Fairy Tale. Pictured at right. Extra free blooming and fast growing. Tr. pkt., \$2.00; $1 / 128$ oz., $\$ 15.00$.
Hybrida Mixed. A choice, large flowered mixture of colors in many attractive shades. 300 seeds, $\$ 2.00$.
- White. (New.) $90 \%$ true white-balance blue-eyed. Various foliage types. 300 seeds, $\$ 2.50$.
- Double Mixed. (New.) $50 \%$ double and semi-double-balance single. All colors and foliage types are represented here. 300 seeds, $\$ 3.00$.


## SALPIGLOSSIS

$125,000 \mathrm{~S}$. Salpiglossis furnishes the retail grower with good cutting material either from a January-February sowing indoors or a later one grown outdoors.

- Emperor Mixture. 30 in. Tall, for cutting. All colors.

Tr. pkt., 20c; $1 / 4$ oz., 40c; 1 oz., \$1.20.
Dwarf Giant Flowered Mixture. 20 in . For bedding and borders. All colors. Tr. pkt., 25c; 1/4 oz., 45c; 1 oz., \$1.50.

## SALVIA <br> See page 44

## SANVITALIA

Procumbens (Creeping Zinnia). 50,000 S. 4 to 6 in. A very fine, dwarf edging plant with small, double, yellow flowers. Tr. pkt., 25c; 1/4 oz., 60c; 1 oz., \$2.00.

## SAPONARIA

VACCARIA. 5500 S. Gypsophila-like flowers.

Rose<br>\section*{White}<br>Prices above 2. each: 1 oz., 35c; 4 ozs., \$1.00; 1 lb ., \$3.25.<br>Saponaria Ocymoides. See page 67.

## SCABIOSA

4500 S. No retail grower should be without some Scabiosa for spring greenhouse or outdoor summer cutting. They're longstemmed and free flowering with a variety of pleasing colors to choose from.

Ageratum Blue. Large flowered azure-blue.
Fire King. Bright scarlet.
King of the Blacks. Deep rich maroon.
Rosette. Deep rose suffused with salmon.

- Shasta Improved. Fine pure white.
- Oxford Blue. Somewhat darker than Ageratum Blue or Blue Moon. Extra large, fully double flowers on fine, long stems.
Prices above 6, each: tr. pkt., 30c; $1 / 4 \mathrm{oz} ., 75 \mathrm{c} ; 1 \mathrm{loz} ., \$ 2.50$.
- Loveliness. Extra large flowered, deep salmon-pink.
- Blue Moon. Fine lavender-blue color with extra large, fully double flowers on long, wiry stems. The standard market color.
Prices above 2, each: tr. pkt., 30c; $1 / 4 \mathrm{oz} ., 75 \mathrm{c}$; 1 oz., $\$ 2.50$.
- Giant Hybrid Mixture. A special strain containing only the new large flowered varieties. Well balanced in good cutflower colors. Use this mixture if you want only a small planting of Scabiosa for cutting.
Tr. pkt., 25c; 1/4 oz., 65c; 1 oz., \$2.00.



## SAINTPAULIA BLUE FAIRY TALE

Otto Panzer, well-known Portland, Oregon, grower, says: "We placed an order with Jim Hogan today for ${ }^{1 / 64}$ oz. Saintpaulia "Blue Fairy Tale.' We feel very grateful for your having introduced this to us, and we did have some very interesting and extremely promising results with the sample. This should make a top-notch crop throughout the entire summer, at least.'

## SCABIOSA, Continued

DWARF CLASS. For bedding and garden work.
Tom Thumb Mixture. 10 in . Extra dwarf and compact plants for bedding and edging.
Tr. pkt., 30c; $1 / 4 \mathrm{oz}$., 60c; 1 oz., $\$ 1.85$.
Perennial Scabiosa. See page 67.

## SCHIZANTHUS

$60,000 \mathrm{~S}$. These easily grown plants literally cover themselves with a brilliant mass of showy blooms. A January sowing will produce nice 3 -inch plants for spring combinations. Sow September to November for larger pot plants and spring cut flowers.

- Ball Giant Flowered. Extra large flowers (often 2 inches in diameter) and unusually brilliant colors. Nice for cutting or makes a choice pot plant if pinched.
Tr. pkt., 85c; $1 / 8$ oz., $\$ 2.25$; $1 / 4$ oz., $\$ 4.00$.
- Ball Dwarf Mixture. A distinctly dwarf growing strain with large, compact heads of medium sized flowers. Makes an excellent pot plant. Tr. pkt., 55c; 1/8 oz., \$1.65; $1 / 4 \mathrm{oz} ., \$ 2.75$.


## SHAMROCK

True Irish Shamrock. 38,000 S. For 2-inch St. Patrick's Day plants sow in late December or early January using 3 or 4 seedlings per pot. Grow cool $\left(50^{\circ}\right)$ after germination. Our seed is the true Trifolium (clover). The best results will be obtained in soil that is about $50 \%$ clay
Tr. pkt., 20c; $1 / 4$ oz., 35c; 1 oz., \$1.20.

## SMILAX

4000 S. Popular climber for greens
Tr. pkt., 40c; $1 / 4 \mathrm{oz}$, 80c; $1 \mathrm{oz} ., \mathbf{\$ 2 . 5 0}$.
Snow-on-the-Mountain. See Euphorbia, page 30.
SNAPDRAGONS
See pages 45 to 49 .

## SOLANUM

See Cherries, Christmas, page 25; Peppers, Christmas, page 39: and Love Apple, page 34.

## Saluia

SPLENDENS (Scarlet Sage). 12,000 S. This strikingly colorful, brilliant scarlet annual is popular wherever bedding plants are grown. The following are listed according to flowering datesearliest first. (Sown April lst in Chicago.) Effective planted with white Petunias.

## EXTRA DWARF

## - FIREBALL

## The First New and Completely Distinctive Salvia Since St. John's Fire

In Fireball we offer an entirely new, earlier, more dwarf Salvia which should find abundant use where extra early blooming and more dwarf habit is wanted. Fireball has a unique base-branching, almost spreading habit, and will bloom profusely and continually until frost. Blooms early (June 20) making flatted Salvia sell on sight! Not to be mistaken for an old obsolete European variety offered under the same name-get reliable seed!
Tr. pkt., \$1.50; 1/8 oz., \$3.50; 1/4 oz., \$6.00; 1 oz., \$18.00.

## DWARF

- St. John's Fire. June 25. The most popular dwarf Salvia. About 12 inches high.
Tr. pkt., \$1.00; 1/8 oz., \$1.65; 1/4 oz., \$2.75; 1/2 oz., \$5.00; 1 oz ., \$9.00.
- Blaze of Fire. June 30. The standard extra early strain. Closely follows St. John's Fire in flowering. 14 to 16 in.
Tr. pkt., 85c; 1/4 oz., \$2.25; 1/2 oz., \$3.85; 1 oz., \$7.25.


## MEDIUM

Firebrand (Early Harbinger). July 10. 18 in. Between Blaze of Fire and America in earliness of flowering. Remains in full flower throughout the summer.
Tr. pkt., 85c; $1 / 4$ oz., $\$ 2.25$; $1 / 2$ oz., $\$ 3.85$; 1 oz., $\$ 7.25$.

- America (Globe of Fire). July 23. 20 in . This is our uniformly true and even stock of this fine variety. Follows Firebrand in flowering date. Popular for background planting.
Tr. pkt., 65c; $1 / 40$ oz., $\$ 2.00$; 1 oz., $\$ 6.00$.



## FIREBALL

ST. JOHN'S FIRE
Comparing St. John's Fire, right, and Fireball, left. Note the unique spreading habit of growth of Fireball. It throws side shoots continually throughout the season, producing a lateral type of growth contrasting markedly with St. John's Fire.

## TALL

- Bonfire. July 25. 26 in. Medium tall, very even. Popular for background planting.
Tr. pkt., 65c; $1 / 4$ oz., $\$ 1.50$; 1 oz., $\$ 5.25 ; 4$ ozs., $\$ 17.50$.
Clara Bedman. July 25. A very free flowering, medium tall strain. Tr. pkt., 65c; $1 / 4 \mathrm{oz} ., \$ 2.00$; 1 oz ., $\$ 6.00$.
Splendens Tall. August 12. 30 in . The original late flowering species.
Tr. pkt., 45c; $1 / 4$ oz., $\$ 1.40$; 1 oz., $\$ 4.50$; 4 ozs., $\$ 15.00$.


## OTHER COLORS

White Fire. June 24. A creamy white Salvia, similar in habit to St. John's Fire.

Tr. pkt., \$1.00; 1/8 oz., \$3.00; $1 / 4$ oz., $\$ 5.00$; 1 oz., \$15.00.

Rose Flame. August 7. Similar in height and flowering season to America, but with a coral-pink calyx surrounding the deeper rose petal tube. A promising deviation from the common scarlet-red of the Splendens class.
Tr. pkt., 75c; $1 / 4$ oz., $\$ 2.00$; 1 oz., $\$ 6.00$.
FARINACEA (Blue Salvia), $24,000 \mathrm{~S}$.
Blue Bedder. July 1. Medium lavender-blue in color and grows about 3 ft . tall with long stems for cutting.
Tr. pkt., 40c; $1 / 4 \mathrm{oz} ., \$ 1.25 ; 1$ oz., $\$ 4.00$.

## - ROYAL BLUE=

July 1. This is our own reselected strain, grown especially for us from an entirely new selection. Color is a true deep blue. We highly recommend this.
Tr. pkt., 50c; $1 / 4 \mathrm{oz}$, , $\$ 1.45$; 1 oz ., $\$ 5.00$.

## Outdaor Snakdragans



## 'HIT PARADE' OF

## [仵HYBRID SNAPS FOR BEDDING

For all-purpose bedding Snaps, you can't beat these genuine
$\mathrm{F}_{1}$ Hybrids, especially adapted to bedding conditions.
You'll have earlier flowers and more of them on bushy plants.

- Memory. Medium pink.
- Temptation. Maroon-red.
- Stardust. Bright yellow.
- Sophisticated Lady. Lavender.
- Mexicali Rose. Deep rose.
- Harvest Moon. Orange-bronze.
- Bob White. Creamy white.
- Hit Parade. Formula mixture of above colors.

Prices above 8, each: tr. pkt., \$1.50; $1 / 32 \mathrm{oz}$., $\$ 4.75$; $1 / 16 \mathrm{oz} ., \$ 8.50 ; 1 / 8 \mathrm{oz} ., \$ 15.50 ; 1 / 4 \mathrm{oz} ., \$ 28.00$.

## BALL 10 BEST

(Rust-Resistant; Self-Pollinated)

- Alaska (Tall). The best long-stemmed white for cutting.
- Canary Bird (Tall). Long-stemmed yellow. Good cut flower.
- Cattleya. (Tall). Rosy lavender.
- Cherry-Red (Medium Tall). A bright, rosy cerise-red.
- Copper Queen (Tall). Shades of bronzy copper; long-stemmed.
- Maximum Crimson (Tall). Deep crimson, valuable for cutting.
- Pinkie (Medium Tall). Lighter than Rosalie; very fine.
- Rosalie (Medium Tall). A rich deep rose; fine for cutting.
- Swingtime (Tall). Fine, medium light pink with white throat.
- Yellow Jacket (Medium Tall). Attractive deep rich yellow.
- Improved California Mixture. A carefully blended mixture of the best tall varieties.
Prices above 11, each: tr. pkt., 30c; $1 / 8$ oz., 50c; $1 / 4 \mathrm{oz}$. . 90c; l oz., \$2.80.
COLLECTION. We offer one tr. pkt. each of the 10 Brst named varieties above for $\$ 2.70$.


## FOR SPRING PLANT SALES

180,000 seeds per oz. If you want bedding Snaps that are in full bloom a week or ten days earlier, that branch and bloom more freely and are more uniform in color and habit-try the "Hit Parade" Hybrids. They're extra nice for cutting, too! The dwarf (Nanum Grandiflorum) type is bushy, with no tendency to sprawl, if not supported. The taller varieties should be supported, if straight stems are wanted.

## TETRAPLOID SNAPS

Tetraploid Snaps or "Tetras" have larger florets with thicker petals and foliage than the ordinary kind. Under good growing conditions really outstanding spikes can be developed.

Crimson. (New.) Bright crimson-red.
Pink. Salmon-pink. Medium tall; huge florets.
Rose. Bright rose.
White. Light creamy white, changing to pure white with age. Yellow. Tall, base-branching, clear yellow. Long spikes and large flowers
Prices above 5, each: tr. pkt., 60c; $1 / 8 \mathrm{oz} ., \$ 1.50 ; 1 / 4 \mathrm{oz}, \mathbf{\$} \mathbf{2 . 7 5 ;}$ $1 \mathrm{oz}, \mathbf{\$ 8 . 2 5}$.

- Giant Ruffled "Tetra" Mixture of all colors.

Tr. pkt., 50c; 1/s oz., \$1.25; 1/4 oz., \$2.25; 1 oz., \$6.75.

## STANDARD SUMMER SNAPS

(Self-Pollinated)
TALL (Maximum). The long-stemmed type for cutting Campfire (Rust Resistant). Bright scarlet, yellow lip. Loveliness (Rust Resistant). Soft rose-pink. Red Cross (Rust Resistant). Striking red, yellow and white. Yellow Giant (Rust Resistant). Rich yellow.
Mixture (Rust Resistant). Choice colors.
Prices above 5, each: tr. pkt., 30c; $1 / 8$ oz., 50c; $1 / 4$ oz., 90c; $1 \mathrm{oz},. \$ 2.80$.

- Velvet Giant. The rich, velvety crimson-red flowers of this variety are much larger than most outdoor Snaps, and the spikes are heavier. Tr. pkt., 60c; 1/8 oz.. \$1.10; 1/4 oz.. \$2.00.
Skyscraper Mixture. Pastel shades of ivory, yellow and pink. Tr. pkt., 50c; $1 / 16$ oz., \$1.00; $1 / 8 \mathrm{oz}$., \$1.85; 1/4 oz., \$3.25.
Improved California Mixture. See 10 Best.
MEDIUM TALL (Majus Grandiflora)
- Orange Shades. Bright and showy; not the usual coppery bronze. Tr. pkt., 40c; 1/8 oz., 70c; $1 / 4 \mathrm{oz}$, , $\$ 1.25$; 1 oz., $\$ 3.75$.
- Mixture (Rust Resistant). Balanced mixture. Not quite as long stemmed as the Maximums, but long enough for cut flowers. Tr. pkt., 30c; 1/8 oz., 50c; $1 / 4 \mathrm{oz} ., 90 \mathrm{c} ; 1 \mathrm{oz} ., \$ 2.80$.
HALF DWARF (Majestic).
Mixture (Rust Resistant). Extra large flowered. Tr. pkt.. 25c; $1 / 8$ oz., 45c; 1/4 oz., 80c; 1 oz.. \$2.80.
DWARF (Nanum Grandiflorum).
Black Prince. Deep velvety crimson.
Gloria. Uniformly dwarf, deep rose-pink. Imported strain.
Golden Queen. Rich golden yellnw.
Purity. Large flowered creamy white.
St. George. Flashing orange-cerise.
Mixture (Rust Resistant). All colors. Ideal for bedding
Prices above 5 , each: tr. pkt., 50c; $1 / \mathrm{s}$ oz., $85 \mathrm{c} ; 1 / 4 \mathrm{oz}, \mathbf{\$ 1 . 5 0 \text { ; }}$ 1 oz., \$5.50.
TOM THUMB
Magic Carpet. An attractive mixture of colors in this extra dwarf class ( 4 to 6 in.).
Tr. pkt., 50c; $1 / 8 \mathrm{oz} ., 85 \mathrm{c} ; 1 / 4 \mathrm{oz} ., \$ 1.50 ; 1 \mathrm{oz} ., \$ 5.50$.


## COLOSSAL SNAPS

This self-pollinated strain is extra vigorous, producing strong, long-stemmed spikes of large, well formed florets.
White Orange Pink Crimson Mellow Orchid

Prices above 7 , each: tr. pkt., 40c; $1 / 8$ oz., $90 \mathrm{c} ; 1 / 4$ oz.. $\$ 1.75$; 1 oz., \$5.00.


GOLDEN SPIKE


SNOWMAN


JACKPOT
(Sold out until June 1)

## Ball Hybrid Snaks

(ANTIRRHINUM) 125,000 S.

Snapdragons unquestionably head the list of seed-grown greenhouse cut flower crops--and rightly so! Because outdoorgrown Snaps seldom equal the quality of well grown greenhouse material, they are virtually free from this competition. Modern $\mathrm{F}_{1}$ Hybrids with their greater vigor and faster growth rate have contributed greatly toward this end. Using single stem culture and summer flowering greenhouse va-

## YELLOW

- Golden Spike No. 1. [fenrerios Pictured at left. A rich, deep golden yellow with long, tapering spikes and close-spaced florets. Best yellow for late winter and spring, but should not be flowered before February in the North.


## PINK and ROSE

- Hercules No. 21. [fincranids Beautiful light pink for spring. Long, graceful spikes of close-set florets. Hard, clean stem.
- Holiday No. 32. E(E)HVBRIDS A very good midseason rose-pink. Clean growth with fine, long spikes.
- Pink Cloud No. 3. [fficheridu Medium pink. Early, with long stems, spikes and really large flowers. May be soft in midwinter; recommended for spring.
Pink Monarch No. 4. [E]Mrerid Rose-pink for late winter and spring. Hard stem and good spike.
- Pink Ice No. 31. Efembarios A bright medium rose with nearly white lips. Clean growth and long spikes. One of the best for midwinter or spring. Sold out till June 1.
Ball Pink Hybrid No. 2. Zefraniol Medium pink. Early and productive.
Jackpot No. 43. [(F) HVBRID Medium deep rose. Pictured above. Sold out till June 1.
- Showgirl No. 42. Zffrrarids A first class, midseason, medium dark rose. Long spikes that will not shatter under our tests.
- Rosanna No. 9. [f) mereibs A deep, bright rose; long, tapering spike and very productive. Fine for any season.
- Rosy Dawn No. 41. [fanrantos Solid, heavy spikes of deep rose. Midseason. Do not flower before February in the North.
rieties, it's possible now in most areas to produce good Snaps almost the year around.
The varieties listed below are the result of a never-ending Snapdragon breeding program here at Ball's-a program that has but one goal in mind: Better Snaps for florists-everywhere! By the way, our Snapdragon breeding workshop is in full bloom in April and May. We'll be happy to have you stop in and see what we're doing.


## WHITE

- Pike's Peak No. 10. [EHVBRID White with slight ivory cast. Extra long spikes and unusually long stems. At its best from late winter on.
Moonbeam No. 11. IEAMERIDS Midseason ivory-white. Medium length, well spaced spike.
- Snowman No. 5. [E]mbride The heaviest selling pure white Snap on the market. Excellent for single stem culture or as a pinched crop. Equally good for midwinter or spring.


## BRONZE and RED

Indian Chief No. 6. ZEFHRBRID Bright, intense bronze with close-spaced florets. At its best in late winter and spring.

- Navajo No. 8. Wernaid We consider this the finest allpurpose red Snap available. It combines an excellent bright, true Snapdragon-red with an extra long spike and hard stem. Midseason.
Ball Red Hybrid No. 7. [EFHrBRID Velvety red. Early and productive, but we prefer Navajo.


## LAVENDER

- Lavender Lady No. 71. (C) HVBRI日 A deep rosy lavender shade with excellent spikes and stems. This is our finest lavender Snap. For late winter and spring.
Esquire No. 72. [fowranibs Bright wine or Fuchsia-purple.


## MIXED

 blended by formula. $1 / 2$ tr. pkt., $\$ 1.75$; tr. pkt., $\$ 3.00$.
Prices all above Ball Hybrids except Mixture: $1 / 2$ tr. pkt., \$2.00; tr. pkt., \$3.50.

## Farcing Snapdragons

## COMPLETE LIST OF VARIETIES-OUR RECOMMENDATIONS ARE DOTTED

ABOUT FLOWERING DATES. In describing the many Snap varieties which we list, we have designated each as early (E), midseason (M) or late (L). This is an arbitrary classification based on our own West Chicago greenhouse trials over a period of years.
From a sowing made August 1, grown on a raised bench as a pinched crop and run $50^{\circ}$ nights, those varieties which normally fower by December 15 we classify as early. Those which flower

## WHITE

Tr. Pkt.

- Pike's Peak No. 10. [TEFMBRID (Ball.) M. White with slight ivory cast. $1 / 2$ tr. pkt., $\$ 2.00$ $\$ 3.50$
Moonbeam No. 11. $\Sigma$ (EFMBRID (Ball). M. Ivory. 1/2 tr. pkt., \$2.00
3.50

Apollo. Z(T)HVBRID (Yoder Bros.). M. Ivory; yellow lip. More vigorous than Margaret
3.50
- Citation. [EFHVBRIDS (Yodèr Bros.). M. Ivory. Very fine, long spikes and clean, hard stems3.50
Jet Pilot. [(F)HYBRID] (Yoder Bros.). M. Pure white ..... 3.50
Junglewood White. L. Extra long stemmed white. Rather late flowering with us. $1 / 2$ tr. pkt., $\$ 1.25$ ..... 2.00
- Margaret. M. Ivory. Very productive ..... 2.00
 $1 / 2$ tr. pkt., $\$ 2.00$ ..... 3.50
Peace. E. Pure white ..... 1.50
- Rockwood's Crystal White. L. An excellent pure white.
For late spring and summer only. $1 / 2$ tr. pkt., $\$ 1.75$ ..... 3.00
Schlegal's White. E. ..... 150
Snowdrift. L. Double flowering white. New, improved strain, but for high light intensity or spring growing areas only. $1 / 2$ tr. pkt., $\$ 1.75$ ..... 3.00
 Clean growing, pure white. $1 / 2$ tr. pkt., $\$ 1.75$..... 3.00Tommy Armstrong. L. Pure white. Closely spacedflorets2.00
Twenty Grand. Lembrids (Yoder Bros.). M. Ivory; flower similar to Junglewood White ..... 3.50
White Wonder Imp. M. Pure white ..... 1.50
LIGHT PINK
- Hercules No. 21. 5 (I) mrbend (Ball). M. Light pink, extra hard, clean stem. $1 / 2$ tr. pkt., $\$ 2.00$ ..... 3.50
Chevy Chase Pink. [Ef) करBRED (Winkler). M. Similar to Maryland Pink, but a shade darker. Shatterproof. $1 / 2$ tr. pkt., $\$ 2.00$ ..... 3.50
- Christina. (7) Hybrids (J. S. Yoder). M. One of the best all-purpose light pinks. $1 / 2$ tr. pkt., $\$ 2.00$ ..... 3.50
 out until June 1. $1 / 2$ tr. pkt., $\$ 1.75$ ..... 3.00
Marie Louise. M. Light shell-pink ..... 2.00
Mary Ellen. [Ef) mranide (J. S. Yoder). M. Light pink. $1 / 2$ tr. pkt., \$1.50 ..... 2.50
Maryland Pink Imp. light pink. $1 / 2$ tr. pkt., $\$ 2.00$ ..... 3.50
St. Louis Pink. L. Light pink for spring ..... 1.50
- Top Flight. E(f) Hurbide (Yoder Bros.). M. Light pink. Similar to Christina but a few days earlier ..... 3.50
 pink. Close-set florets on long, strong spikes. $1 / 2$ tr. pkt., $\$ 2.00$ ..... 3.50
Whirlaway. [5) HVBRIOS (Yoder Bros.). M. Pink with large yellow lip ..... 3.50
between December 15 and January 10 we call midseason; while the remainder that flower after January 10 we consider late. Locality and amount of sunshine, of course, have a bearing on flowering dates, too.
It should be borne in mind that while many of the early and midseason varieties are excellent for late flowering if sown later, late varieties cannot be flowered early unless sown in June in our locality.
MEDIUM PINK Tr. Pkt.
- Holiday No. 32. पFefreride (Ball). M. Medium pink; fine long spikes. $1 / 2$ tr. pkt., $\$ 2.00$ ..... $\$ 3.50$
Pink Cloud No. 3. [Tfatreride (Ball). M. Medium pink.
Recommended for spring. $1 / 2$ tr. pkt., $\$ 2.00$ ..... 3.50
 For late winter and spring. $1 / 2$ tr. pkt., $\$ 2.00$ ..... 3.50
- Pink Ice No. 31. [Cfenveride (Ball). E. Bright pink with nearly white lips. Sold out till June 1. $1 / 2$ tr. pkt., \$2.00 ..... 3.50
Ball Pink Hyb. No. 2. [ifararias (Ball). E. Medium pink. Extra early and very productive, $1 / 2$ tr. pkt., $\$ 2.00$ ..... 3.50
Cheviot Maid No. 33. M. Clear rose-pink ..... 1.50
- Crusader. [ffinverids (Yoder Bros.). M. Light "Dorcas Jane" pink shade. An excellent midwinter Snap ..... 3.50
- Dorcas Jane. [(f)HYBRID (Burkey). M. Long spikes of silvery pink. $1 / 2$ tr. pkt., $\$ 1.50$ ..... 2.50
Gusto. [EAMBniol (Yoder Bros.). E. "Dorcas Jane" pink color ..... 3.50
Rockwood's Summer Pink No. 1. L. Medium pink. For late spring and summer only. $1 / 2$ tr. pkt., $\$ 1.75$ ..... 3.00
ROSE
- Jackpot No. 43. [(E)/Frerid (New-Ball.) See page 46.M. Medium deep rose. An ideal commercial color withsolid, clean stems of medium length carrying long spikeswith excellently spaced florets. Production very good.Sold out till June 1. 1/2 tr. pkt., $\$ 2.00$3.50
- Showgirl No. 42. [(f)HYBRide (Ball). M. Medium dark rose. Long, shatterproof spikes. $1 / 2$ tr. pkt., $\$ 2.00$ ..... 3.50
 rose with long tapering spikes. $1 / 2$ tr. pkt., $\$ 2.00$ ..... 3.50
Rosy Dawn No. 41. [(E)Hrbind (Ball). M. Deep rose. Do not flower before Feb. in north. $1 / 2$ tr. pkt., $\$ 2.00$ ..... 3.50
Better Times (Windmiller). M. Bright cerise-rose. 1/2 tr. pkt., \$1. 25 ..... 2.00
- Christmas Cheer. [有)hrerios (Windmiller). E. Extra early, productive, bright rose. $1 / 2$ tr. pkt., $\$ 1.75$ ..... 3.00
Delworth's Supreme. M. Long stemmed, deep rose ..... 1.50
Libby. IEFHYBRIDS (J. S. Yoder). M. Dark rose. $1 / 2$ tr. pkt., $\$ 2.00$ ..... 3.50
Maxine. [fiturbibl (Smith). E. Winter flowering medi- um rose. $1 / 2$ tr., pkt., \$1.75 ..... 3.00
New Times. [tenterios (Pan-America). E. Bright, deep rose. Medium long spikes with clean, firm stems $1 / 2$ tr. pkt., \$1.75 ..... 3.00
- Peggy Schumann. L. Beautiful creamy rose ..... 2.00
Pensive. [f)hybrids (Yoder Bros.). M. Dark rose ..... 3.50


# Farcing Suapdragons 

## NEW YODER BROS．VARIETIES

At the time this catalog went to press we had not had an opportunity to see any of the following new Yoder Bros Hybrids in flower，and are therefore listing them with the originator＇s color and season descriptions only．More com－ plete descriptions will be printed in our summer catalog following our own greenhouse trial observations．

White Knight．［（E）Hybrid］Paper white．Midseason． Rowenna．［7forerios Light rose－pink．Early． Wintergreen．［RE）HYBRID］Light rose－pink．Early．
Rosebud．［E］nvasiol Pastel pink．Late．
Prestige，［fitherid Dark pink．Midseason．
Broker＇s Tip．［fin）Herial Deep yellow．Late．

Prices above 7，each：tr．pkt．，$\$ 3.50$ ．

## ROSE，Continued

Tr．Pkt．

 pink．Good spikes and stems3.50

Spartan Rose．［fforvarial（Mich．State College）．L．Me－ dium deep rose with long heavy spikes．For late winter and spring only． $1 / 2$ tr．pkt．，$\$ 1.75$3.00

Double Sunshine Rose－Pink．（Yerxa）．L．Double flowers of bright rose－pink．Floret placement is good，but high light intensity is needed to develop long spikes． Tr．pkt．（over 500 seeds）

## YELLOW

－Golden Spike No．1．Efenrbarios（Ball）．A rich，deep golden yellow with long tapering spikes and close spaced florets．Best yellow for late winter and spring． See page 46． $1 / 2$ tr．pkt．，$\$ 2.00$3.50
Day Star．［fforvand（Yoder Bros．）．E．Light yellow； prefer War Admiral ..... 3.50
Ethel．M．The most satisfactory self－pollinated yellow ..... 1.50
Goldrush．［（E）HVando（Winkler）．M．Large flowered medium yellow；good producer． $1 / 2$ tr．pkt．，$\$ 2.00$ ..... 3.50
Junglewood Yellow．M．Medium yellow． $1 / 2$ tr．pkt．．\＄1．25 ..... 2.00
Klondyke Supreme．L．Rich，deep yellow ..... 1.50
－Patricia．［fifnverios（J．S．Yoder）．M．Medium yellow， $1 / 2$ tr．pkt．。 $\$ 2.00$ ..... 3.50
Rockwood＇s Summer Yellow．L．Fairly deep yellow． For late spring and summer only． $1 / 2$ tr．pkt．，$\$ 1.75$ ..... 3.00
Seabiscuit．Th Hrbrid（Yoder Bros．）．M．Medium yel－ low．Similar to War Admiral except somewhat later and taller ..... 3.50
－War Admiral．［fit Hrabiod（Yoder Bros．）．E．Excellent medium yellow for midwinter ．．． ..... 3.50
Yellow Peggy Schumann．L．For spring ..... 2.00
Yolo Wonder．［（f）Hrbaid（New－Windmiller）．A rich yel－low for midwinter with large florets and strong stems．$1 / 2$ tr．pkt．，\＄2．00

## BRONZE

Tr．Pkt
Indian Chief No．6．还）hrerios（Ball）．M．Scarletbronze． $1 / 2$ tr．pkt．，$\$ 2.00$\＄3．50
Afterglow．M．Bright orange－bronze ..... 1.50
 bronze with pink throat． $1 / 2$ tr．pkt．，$\$ 2.00$ ..... 3.50
 en bronze ..... 3.50
－Gallant Fox．［if）hrarias（Yoder Bros．）．M．Medium rosy bronze．Very fine ..... 3.50
Glorious．M．Bright reddish bronze for spring ..... 1.50
Jubilee．［（E）HYBRID（Winkler）．M．Light golden bronze．
Habit similar to Goldrush． $1 / 2$ tr．pkt．，$\$ 2.00$ ..... 3.50
Lady Dorothy．E．Bright rosy bronze．1／2 tr．pkt．，\＄1．75 ..... 3.00
 season orange－bronze；lighter than Barbara．Shatter－ resistant． $1 / 2$ tr．pkt．，$\$ 2.00$ ..... 3.50
Schlegel＇s Early Bronze．M． ..... 2.00
Sun Briar．［Emybrids（Yoder Bros．）．E．Medium bronze ..... 3.50
RED
－Navajo No．8．近）Hrbarid（Ball）．M．We consider this the finest all－purpose red Snap available． 1／2 tr．pkt．，\＄2．00 ..... 3.50
Ball Red Hyb．No．7．［（l）HYBRID（Ball）．E．Early and productive，but we prefer Navajo． $1 / 2$ tr．，$\$ 2.00$ ..... 3.50
Maryland Red．［flemeriol（New－Winkler）．Early，
bright red slightly lighter than Navajo．Shatter resist－ ant． $1 / 2$ tr．pkt．，$\$ 2.00$ ..... 3.50
Priscilla Ann．［ffrbano（J．S．Yoder）．M．A wine－red， similar to Shisler＇s Red in color． $1 / 2$ tr．pkt．，$\$ 2.00$ ..... 3.50
Rockwood＇s Summer Red．L．For late spring and summer only． $1 / 2$ tr．pkt．，\＄1．75 ..... 3.00
Shisler＇s Red．M．Attractive wine－red ..... 2.00
LAVENDER
－Lavender Lady No．71．［ferneatos（Ball）．A deep rosy lavender shade with excellent spikes and stems．For late winter and spring．See page $46.1 / 2 \mathrm{tr}$ ．pkt．，$\$ 2.00$ ..... 3.50
Esquire No．72．［ffarbilid（New－Ball）．M．A bright wine or fuchsia－purple that combines well with whites and yellows．Fairly long，well spaced spikes with firm stems． $1 / 2$ tr．pkt．，$\$ 2.00$ ..... 3.50
Ball Lavender．Rosy lavender．Prefer Lavender Lady ..... 1.50
Bold Venture．［fervaniol（Yoder Bros．）E．Fuchsia－ purple．Long stems and spikes ..... 3.50
Schumann＇s Lavender．L．Popular spring variety ..... 2.00
Windmiller＇s Lilac．M．Long－stemmed rosy lilac ..... 2.00

## MIXTURES

Hybrid Formula Mixture．Mixture of Hybrid Snaps． $1 / 2$ tr．pkt．．\＄1．75 ..... 3.00
Ball Forcing Mixture．Self pollinated varieties ..... 1.00

[^1]BRIEFS ON SNAP CULTURE

## Soils

Good Snaps can be grown in a wide variety of soils. As a general rule any soil that will grow good Mums will grow good Snaps. The really important point is that it contain plenty of organic matter. While this may take the form of manure, be sure it is well rotted. As a matter of fact, peat is generally preferred because the bacteria which are necessary to decay manure rob the soil of essential plant nutrients.
The amount of organic matter which a soil needs depends upon its basic structure. Heavy, clay-like soils will need more than loose, sandy sorts. If an average good garden or field soil is to be used, one part of organic matter should be incorporated with each two or three parts of soil. To this should be added three pounds of $20 \%$ superphosphate per 100 square feet of bench area before steaming. Other than this we prefer to depend upon regular feedings as soil tests indicate their need rather than to load the soil with too much fertilizer to start with.

## Sterilizing

We like to steam sterilize our soil before benching, too. It cleans up disease organisms, kills soil-borne weed seeds and insects and tends to improve the soil's physical condition. Low ( 8 to 10 lbs .) steam pressure does the job for us. Holding soil temperatures at $180^{\circ}$ for half an hour after this temperature has been reached is all it takes. After sterilizing, a heavy leaching with clear water will tend to prevent an excessive build-up of nitrates which might injure Snap roots.

## Seed Sowing

Vermiculite, peat, or soil and peat mixtures all make satisfactory materials for germinating Snap seed. We like to have the flats well watered before sowing, which may be done either broadcast or in shallow rows. We prefer the latter since it permits better aeration after the seedlings get started. No additional soil covering is needed for this fine seed-a light misting with a fine spray will settle it into the soil. If weather is hot or windy, flats should be protected with cheesecloth or paper shade until well up, then they will enjoy full light and a cooler, airy location. Seeds should germinate in 3 or 4 days in summer, 7 or 8 days in winter in a night temperature of $60^{\circ}$.

## Planting

If bench space is available, we like to bench seedlings directless labor and better growth. It works nicely even in hot weather, if the soil is moist before benching, seedlings are planted shallow, and misted within minutes of benching and regularly until new roots show.
In regard to the matter of spacing, we believe $3 \times 6$ inches is the most economical and profitable for a winter single stem crop with $3 \times 5$ inches being enough for late spring and summer crops. We space our pinched crops $7 \times 8$ inches, finding this sat isfactory for most varieties. If you are obliged to transplant, band or pot seedlings, do not pinch them until plants have been benched and have taken hold. To pinch before benching will usually result in only two top breaks rather than the four or so that each plant should produce. We like to pinch when plants are about 8 inches high, leaving 3 good pairs of leaves.

## Summer-Fall Snaps

are being grown more every season. Direct planted and grown single stem, they flower in a little over two months from benching, and seem to be in good demand. Short growing time means low production costs. Make several sowings, so they will keep coming in.

## Sowing Dates

The dates given here are intended as suggestions only-based on our experience here in the Midwest. Various things can throw them off. Examples:

1. Hot, dry, bright fall-will bring Christmas crops in early.
2. Dark, cloudy fall-winter delays late winter crops.
3. The tables are based on medium early varieties on raised benches, $50^{\circ}$ night temperatures most of the winter, at least. $45^{\circ}$ nights or ground beds will take longer.
4. Your local climate. Where winters are warm and sunny, winter Snaps will bloom faster.
5. Varieties differ in blooming dates.

There are several important advantages of germinating Snap seeds in rows. If you use soil as a germina-
tion medium, the tion medium, the soil can be thoroughaerated by breaking the surface between the rows until the seedlings can be pricked off. Then, too, if damp-off becomes a problem, it is less apt to spread through the seed flat, tending to run down to the end of a row and out. Another important advantage is that when sown in rows the soil may be compressed to form the row and moisture the row and moisture is better controlled down in the small ing an ideal environing an ideal environment for seed germ-
ination. ination.


## Single Stem

No-pinch growing seems to be accepted more each year. Reasons:
A. Quicker crop--gets in $2-3$ weeks sooner. Bench cuts out faster, more evenly.
B. Fewer culls-more uniformity.
C. Controlled flowering date--by making a succession of properly scheduled sowings, you can be in cut when you want them-or steadily from January to June, as we do.

Sow

July 20
Aug. 1
Aug. 12
Sept. 1
Sept. 8
Oct. 1
Dec. 1
Feb. I
April 23
May 23

## Flower

Nov. 15. Earlier if fall is hot.
Dec. 15
Jan. 1
Feb. I
March 1. 1-2 weeks later if very cloudy winter.
April 1
May 1
June 1
Aug. 1
Sept. I

## Pinched Crops

Wait till breaks show in leaf axils-plant usually 6.8 inches high--then pinch to leave 3 pairs of leaves.

Sow
July 20
Aug. 1
Aug. 20
Sept. 5
Sept. 25
Nov. 20

Flower
Mid-Dec.
Early Jan.
Early Feb.
Early March
Early April
Mid-May

## Temperature

Normal during firing season: nights $50^{\circ}$, cloudy days $57^{\circ}$. sunny days $65^{\circ}$.

# ANNUALS-Continued STATICE 

SINUATA. 350 seed heads per oz. $2^{1 / 2} \mathrm{ft}$. This attractive annual is largely grown outdoors, especially in southern localities, but a midwinter sowing makes a nice late spring greenhouse crop. May be used in the fresh state or dried.

- Heaverily Blue. Bright, clear sky-blue, the color of Heavenly Blue Morning Glory.
Tr. pkt., 50c; 1 oz., 95 c ; 4 ozs., $\$ 3.20$; 1 lb ., $\$ 9.60$.
Market Rose. Deep rose, a warmer shade than Rosea Superba. Tr. pkt., 30c; 1 oz., 65c; 4 ozs., $\$ 2.20$; 1 lb ., $\$ 6.60$.
- Market Grower's Blue. Fine even deep blue. Excellent stock.

Kampf's Tall Improved. The standard long-stemmed blue.
Lavender Queen. A very pleasing shade of pastel lavender.
Fine color and good grower.
Rosea Superba. Rose.
© Snow Witch. Beautiful, clear white

- Bonduelli Superba. Similar in type to the Sinuatas but with large yellow flowers.
Prices above 6 , each: tr. pkt., 20c; 1 oz., 50c; 4 ozs., $\$ 1.75$; $1 \mathrm{lb} ., \$ 5.25$.


## - SUPERB HYBRIDS

Contains a complete range of colors, from white through chamois, pink, rose, and light blue to deep blue. Heads are large and compact.
Tr. pkt., 20c; 1 oz., 50c; 4 ozs., \$1.75; 1 lb., \$5.25.

Suworowii (Russian or Rat-Tail Statice). 12,000 S. A very useful Statice for greenhouse forcing. Long, lavender spikes. Tr. pkt., 30c; 1/土 oz., \$1.00; 1 oz., \$3.00.
Perennial Statice. See page 67.

## STOCKS

See pages 52 and 53 .

## STRAWBERRY

Harzland. $90,000 \mathrm{~S}$. Small red fruits on fairly compact runnerless plants. A nice novelty. Tr. pkt., 50c; $1 / 16$ oz., $\$ 1.50$.
Strawflower. See Acroclinium, page 14, and Helichrysum, page 32.

## STREPTOCARPUS

$750,000 \mathrm{~S}$.

## WIESMOOR HYBRIDS

(Cape Primrose). Fringed, orchid-like flowers 4-5 inches across in a bright array of colors, including shades of pink, red, blue, lilac and white. Sow from October to March for cut flowers or pot plants from April to December. Originator's tr. pkt., \$1.25; 5 tr. pkts., \$5.25.


STREPTOCARPUS

statice heavenly blue

## STRELITZIA <br> (BIRD OF PARADISE

Regina. Exhibition strain. Giant flowers of dark blue and deep orange. 10 seeds, $\$ 1.25 ; 100$ seeds, $\$ 10.00$.

Sunflower. See Helianthus, page 32.

## SWEET PEAS

See pages 54 and 55 .

## THUNBERGIA

Alata (Black-Eyed Susan), 1100 S . Excellent used as a climber or as a trailing plant for porch boxes and urns. Makes a dense growth producing an abundance of flowers in shades of yellow, buff and orange--with black centers.
Tr. pkt., 25c; $1 / 1 \mathrm{oz} ., 60 \mathrm{c} ; 1 \mathrm{oz} ., \$ 1.80$.
Gibsoni. 500 S . Flowers of a solid, deep orange are twice the size of Alata. Tr. pkt., 85c; 1/8 oz., $\$ 1.85$; $1 / 4$ oz., $\$ 3.50$.

## TITHONIA

3500 S .
 yellow discs are carried on erect, bushy plants. Makes a good cut flower.
Tr. pkt., 40c; $1 / 8$ oz., 90c; $1 / 40 \mathrm{oz} ., \$ 1.50 ; 1 \mathrm{oz} ., \$ 4.50$.
Tobacco Plant. See Nicotiana, page 39.

## TORENIA

$375,000 \mathrm{~S}$. An excellent plant for spring combination use or for bedding, especially in semi-shade.

Fournieri Grandiflora. Rich, deep blue with violet and yellow blotch on lip.
Fournieri Campacta, Blue. A dwarf form of the above.
Fournieri Compacta, White. Dwarf white.
Prices above 3, each: tr. pkt., 40c; $1 / 8$ oz., \$1.25; $1 / 4 \mathrm{oz} ., \$ 2.25$.

## ANNUALS-Continued VERBENAS

$10,000 \mathrm{~S}$. One of the most colorful and showy plants for bedding, window boxes or combinations. Seed should be sown in a soil temperature of $65^{\circ}$ to hasten germination which is sometimes slow. Once established, $50^{\circ}$ nights suits them nicely, but be sure to pinch them early to avoid straggly growth.

GRANDIFLORA. Low growing (about 1 ft .) and spreading in habit, with large flowers. Covers more ground than the other Verbena types.

- Beauty of Oxford. A very choice, vigorous growing strain with extra large flowers. Colors range from clear rose-pink to deep rose-red, all with slight white eye.
Crimson Glow. Warm, crimson-red without eye.
Dannebrog. Very attractive bright scarlet with large white eye. Ellen Willmotr. Extra large, salmon-pink.
Floradale Beauty. Large flowers in shades of red and pink.
- Lavender Glory. Very fine, large flowered lavender with white eye. About $75 \%$ true to type, balance white and purple.
Luminosa. Deep salmon, shaded pink, with white eye.
Mayflower. Shades of pink.
Mounty. A brilliant scarlet or cardinal-red with small light eye. Color deeper than Spectrum Red and stronger in growth.
- Pure White. Very even strain. Large flowered and vigorous.

Rosea Stellata. Clear deep pink with white eye.

- Royale. Large flowered rich deep blue with eye.
- Spectrum Red. Very bright rich scarlet with no eye.

Sutton's Blue. Deep royal blue without eye.

- Mixture of all colors in the Grandiflora class.

Prices above 15, each: tr. pkt., 40c; $1 / 4$ oz., 80c; 1 oz., $\$ 2.85$.
BUSH TYPE. 10 in. A very uniform, semi-dwarf, but vigorous type of growth. Flowers are carried above the foliage, adding much to the attractiveness of this class.

Firelight. (New.) A welcome addition to the popular Bush type Verbenas. Flowers are a vivid, solid red.
Tr. pkt., 55 c ; $1 / 4 \mathrm{oz} ., \$ 1.30 ; 1 \mathrm{oz} ., \$ 4.00$.

- Giant Salmon Queen. Large flowered, bright coral-salmon with creamy white eye.
Starlight. Large flowers are a rich mid-blue with ivory-white eye. An excellent companion to Salmon Queen.
Blue Sentinel. Bright blue with very little violet shading. Practically no eye.
Snowball. "Snow-white." Fine, free flowering, pure white.
Prices above 4, each: tr. pkt., 55c; $1 / 4 \mathrm{oz} ., \$ 1.30 ; 1 \mathrm{oz} ., \$ 4.00$.
UFRIGHT TYPE. Distinctly upright in habit, branching from the base of the plant.
- Rainbow Mixture. Semi-dwarf ( 8 to 10 in .), but upright growing plants in a wide assortment of colors. Its earliness and erect habit make this strain valuable for pots and combination boxes as well as for borders.
- Royal Bouquet. 12 to 14 in. A mixture of all colors in this upright type. Stems are long enough for limited cut flower use. Prices above 2, each: tr. pkt., 55c; $1 / 4 \mathrm{oz} ., \$ 1.65$; $1 \mathrm{oz} ., \$ 5.00$.
DWARF TYPE. 4 to 5 in . An extra dwarf type for border and pot work. Not suitable where summer heat is excessive.
- Sparkle. Bright red with white eye. Tr. pkt., 50c; $1 / 4 \mathrm{oz}$., $\$ 1.50$; 1 oz., $\$ 4.50$.
Crystal. (New.) A snow-white companion to Sparkle. Large flowers. Tr. pkt., 50c; $1 / 4 \mathrm{oz}$. ., $\$ 1.50$; $1 \mathrm{oz} ., \$ 4.50$.



## VINCA ALBA

Mr. Knapp of Knapp's Marion Greenhouse, Marion, III., has this to say about Vincas: "This Vinca is something we have lef fall by the wayside. Do you know that it is positively one of the most satisfactory and friendliest plants we have? We wouldn't want our customers to hear us say it, but they are actually more satisfactory than Petunias in many ways. You should feature them some year."

## VERBENAS, Continued

Fireball. Bright, fiery scarlet, small flowers.

- Mixture of all colors in this compact class.

Prices above 2, each: tr. pkt., 40c; $1 / 4$ oz., $\$ 1.10 ; 1 \mathrm{oz} ., \$ 3.25$.
Ideal Florist Strain (Dwarf Masterblend). Low growing, but spreading in habit with large flowers in an extremely wide range of unusual colors-many with attractive light eyes. Early and free flowering. Fine for flat sales.
Tr. pkt., 75c; $1 / 4 \mathrm{oz}, \mathbf{\$ 2 . 0 0}$; 1 oz., $\$ 6.00$.
MISCELLANEOUS VARIETIES.
Bonariensis. $90,000 \mathrm{~S}$. 36 in . A long-stemmed Verbena with lavender-blue flower clusters. Has some cut flower value. Germination slow.
Tr. pkt., 40c; $1 / 16$ oz., 75c; $1 / 8$ oz., $\$ 1.35$.
Venosa Lilacina. 60,000 S. 8 to 10 in . Flowers continuously throughout our hot Midwestern summers. Deep lilac flowers. Tr. pkt., 30c; 1/4 oz., 50c; 1 oz., \$1.75.

## VINCA

ROSEA (Periwinkle). $21,000 \mathrm{~S} .15 \mathrm{in}$. One of the most generally satisfactory outdoor bedding plants we have. Will stand an almost unbelievable amount of hot, dry weather. Sow early with bottom heat.

- Twinkles. Soft blush-pink with bright red eye.
- Pink. The standard medium pink.

Crimson. Slightly darker than above.
Alba Pura. Pure white.
Alba Oculata. White with red eye.
Mixture of above colors.
Prices above 6, each: tr. pkt., 30c; $1 / 4 \mathrm{oz} ., 60 \mathrm{c} ; 1 \mathrm{oz} ., \$ 2.00$.
Viola. See page 67.

## WALLFLOWER

Gold Standard. 14,000 S. Richly fragrant deep golden yellow flowers borne in spikes. In appearance and general habit Wallflowers resemble Stocks.

ALL-DOUBLE NON-BRANCHING. Sow in December and grow in shallow soil (flats are fine) spaced $4 \times 4$ in. for valuable spring cut flowers.

Helios. Bright golden yellow.
Vulcan. Velvety, mahogany-red.
Prices above 2, each: tr. pkt., (about 700 seeds), \$1.00.
Perennial Wallflower. See Cheiranthus, page 61.


Left to right, five popular varieties. Lilac-Lavender, Minaret, Purple Heart, Ball White No. 16, and Ball Supreme No. 22.

## PINK, ROSE and RED

Pacific Pink. A bright, luminous salmon-rose-pink without the bluish or orchid cast of other pinks and roses. Somewhat later than most Column Stocks, and is at its best in spring. Pictured on opposite page.

- No. 22 Ball Supreme. A long-stemmed, vigorous growing variety with fine, heavy spikes of rich silvery rose.

No. 11 Ball Pink. A medium pink. Earlier and somewhat lighter than our No. 22 but not quite as long-stemmed.

No. 14 Ball Rose. An early flowering, fairly deep rose-pink. Darker in color than Supreme No. 22.
No. 9 Chamois-Pink. A warm rosy buff color. Good stems and flower spikes.
No. 7 Malmaison Pink, Improved. Long stems and spikes of soft shell-pink; a popular color.

No. 6 American Beauty. Rich deep American Beauty or car-mine-rose.

- No. 8 Ruby Improved. A brilliant scarlet-crimson without the purple cast of other reds.

Pink Giant. Color identical to No. 14 Ball Rose, but later and somewhat taller.
U.S.D.A. Double Pink. A U.S.D.A. development which improves the Hansen dark-leaved single, light-leaved double strain. Light-leaved doubles may be selected in seedling stage. In our greenhouse trials stem length was greater than Hansen's but not as long as regular Columns. Doubles retain some light leaf color in blooming stage.
$1 / 2$ tr. pkt., $\$ 1.00 ;$ tr. pkt., $\$ 1.75$; $1 / 8$ oz., $\$ 3.30$; $1 / 4$ oz., $\$ 6.00$; 1/2 oz., \$10.00; 1 oz., \$18.00.

## Ball coumn Stacks

## (NON-BRANCHING)

$16,000 \mathrm{~S}$. The most important points in growing good greenhouse Stocks are: (1) plant only in steamsterilized or fresh soil to avoid root rot; (2) grow them cool-not over $50^{\circ}$ nights. A spacing of $3 \times 6$ inches is ample for good quality and they may be safely sown in our latitude from July 15 to February 15. Later sowings may come blind. Constant breeding and selection maintain a uniformly high percentage of doubles in our strains which may be further increased, if the largest seedlings are selected in planting or thinning.

## Our best greenhouse varieties are dotted ().

## WHITE

No. 25 Minaret. This fine white combines the close-spaced spike of No. 16 with a larger, longer stem which should make it quite valuable to cut flower growers.
Pacific White. A pure white with large, well spaced florets. Spike is similar to Ball White No. 16, but stems are somewhat longer. A bit later than No. 16 but earlier than Avalanche. Recommended for both greenhouse and outdoor use.

- No. 16 Ball White-Medium Tall. This early pure white is the most popular variety on our entire list.
No. 99 Ball White. Averages 4 to 6 inches taller than No. 16.
White Giant. Good long-stemmed white for outdoor growing. We prefer our No. 16 Ball White for greenhouse use, although some growers have reported favorably on White Giant for this purpose.
Gardenia, Imp. Pure white. Branches somewhat. A fine outdoor strain.
No. 5 Ball Dwarf White. An ideal pot plant variety.
- Avalanche. Finest white for outdoor growing; also excellent for greenhouse use although later than No. 16.


## LAVENDER, BLUE and PURPLE

- No. 1 Lilac-Lavender Improved. Early blooming. Silvery lilac. Good stems with long flower spikes.
No. 3 Ball Blue Improved. Deep bluish lavender; long spikes.
- No. 21 Purple Heart. Long-stemmed and large-flowered, bright violet-purple. Early blooming.


## MISCELLANEOUS VARIETIES

## No. 26 BUTTERSCOTCH

This fine, creamy yellow is a definite improvement over present strains in stem length, flower size and color. Highly recommended.

- No. 20 Ball Apricot. Long spikes of rich apricot tinged pink.

No. 24 Deep Apricot Improved. Darker than No. 20.
No. 17 Gold Standard. Creamy ivory-yellow

PRICES all Column Stocks (except where noted), each: $1 / 2$ tr. pkt., 75c; tr. pkt., \$1.25; 1/4 oz., \$2.75; $11 / 2$ oz., $\$ 5.25$; 1 oz., $\$ 10.00$. COLLECTION: 1 tr. pkt. each of the 6 Best (dotted) varieties, for $\$ 6.75$.

## Ball соимм Stacks

## (NON-BRANCHING)

## MISCELLANEOUS VARIETIES, Continued

Yellow Wonder. Popular ivory-yellow for outdoor growing. Branches slightly.
No. 10 Mixture. Our own formula mixture.
Prices above Column Stocks, each: $1 / 2$ tr. pkt., 75c; tr. pkt., \$1.25; 1/1 oz., \$2.75; 1/2 oz., \$5.25; 1 oz., \$10.00.

## Hansen's ALL-DOUBLE Select Stocks

Light leaved doubles and dark leaved singles--apparent in the seedling stage at $50^{\circ}$-provide a positive means of separating singles from doubles in this strain. Stems are about one-half as long as the regular Ball type Column Stocks.

## Shell-Pink

Rose
White
Prices above 3 varieties, each: tr. pkt., $\$ 1.50$; $1 / 1$; oz., $\$ 2.70$; $1 / 4 \mathrm{oz}$., \$9.00.

Dwarf Park Mixed. A dwarf branching type of the All-Double Select Stocks described above. Tr. pkt., 75c; $1 / 16 \mathrm{oz.}, \mathrm{\$ 1.20;} 1 / 4 \mathrm{oz}, \$ \$ 4.00$.

## BRANCHING STOCKS

## TRYSOMIC HI-DOUBLE STOCKS

An unusual new race of branching Stocks which, according to the originator, makes use of scientific plant breeding principles to produce $80.85 \%$ double flowering plants.

Chamois. (New.) Buffpink.
Canary Yellow. (New.)
Fiery Red. (New.) Lilac-Lavender. (New.)

Price above 8, each: 1/2 tr. pkt., \$1.00; tr. pkt.. \$1.75; 1/\& oz., \$2.90; 1/4 oz., \$5.00.

## IMPROVED BISMARCKS

Antique Copper. Copperred.
Apple Blossom. Pale, delicate pink.
Blood-Red. Ruby-red.
Chamois. Chamois or buff.
Formula Mixture of above colors
Prices above 11, each: tr. pkt., 40c; 1/4 oz., \$1.25; 1 oz., \$4.00.

- Elk's Pride. Rich purple. Golden Ball. Ivory-yellow.
- Lavender. Lilac-lavender. Lilac. Fairly deep lilac-blue - Rose. Bright rose-pink. Shasta. White.


Navy-Blue. (New.)
Bright Rose. (New.)
White. (New.)

- Trysomic Hi-Double Mixture


PACIFIC PINK

## FOR OUTDOOR GROWING

We recommend the following for cut-flower use outdoors in California, Arizona, and other areas where they are grown.
Avalanche
Pacific Pink

White Giant
Gardenia, Imp.
Pacific White
Ball Supreme No. 22
Ball Rose No. 14
Malmaison Pink Improved No. 7 Lilac-Lavender Improved No. 1 Purple Heart No. 21
Yellow Wonder
Pink Giant
Write for Quantity Prices

## GIANTS OF CALIFORNIA

Stronger growing than the Bismarcks.
Golden Gate. Soft, creamy yellow.
Pacific. Fairly dark lilac-mauve.
Redwood. Bright ruby-red.
Santa Barbara. Chamois or buff.

- Santa Maria. Best branching white.

Tahoe. Clear lavender.

- Yosemite. Rich rose-pink. Prices above 7 , each: tr. pkt., 40c; $1 / \pm$ oz., \$1.40; 1 oz., \$4.75. Mixture of all colors in this class.
Tr. pkt., 40c; $1 / 4$ oz., \$1.25; 1 oz., \$4.25.


## DWARF TEN WEEK

| Blood-Red | Carmine-Pink | Lavender | Canary-Yellow |
| :---: | :---: | :---: | :---: |
| Deep | Rose | Purple | White |
|  | Formula Mixture |  |  |
|  | ach: tr. pkt., | 30c; 1/4 oz., | $1 \mathrm{oz}$. , \$2.25 |

## BROMPTON or WINTER

Early Harbinger. Mixed colors. Tr. pkt., 50c; $1 / 1$ oz., $\$ 2.00$; $1 \mathrm{oz} ., \$ 6.00$.


350 seeds per oz.

## ZVOLANEK'S MULTIFLORAS <br> Originator's Seed

These fine varieties are the result of years of painstaking selection on the part of William Zvolanek, veteran California Sweet Pea breeder. They are unusually free flowering and long-stemmed with many stems carrying 5 and 6 flowers instead of the usual 3 and 4. Not hard to visualize what this means to growers in better market returns over a period of a few weeks of picking.

Blue Wonder. (New.) Fine, clear medium blue flowers on very long, strong stems. Crop failure.
Deep Rose. Deep, bright rose; fine for spring. Long stems, and vigorous growth.

- GEO. J. BALL

GEO. J. BALL
New multiflowered, deep coral-rose

Named for the late Geo. J. Ball, this new, deep coral-rose is one of the finest Multiflora Sweet Peas.

Giant Lilac. Bright mauve, same color as Triumph. Large flowers on extra long, heavy stems. Strong growth. Crop failure.

- Lavender. Orchid-lavender, near Twilight in color. A strong grower with extra long stems.
Light Rose-Pink. (New.) Almost flesh-pink in color. Large flowers on long stems.
Orange-Cerise. Extra large flowers on long stems. A bright and striking color.
- Rose. Extra large, medium rose flowers on extra long, heavy stems. Vigorous growth.
Red. Christmas red.
- Salmon-Pink. Large, medium rose-pink flowers with salmon cast. Stems are extra long, but not as heavy as the other varieties in this class.
Whirlwind. Large, light rose flowers on long stems.
- White. Pure white. Long, strong stems.

Multiflora Mix. A complete color assortment.
Prices above 13 varieties, each: $1 / 2$ oz., $\$ 1.50 ; 1$ oz., $\$ 2.75 ; 4$ ozs., $\$ 9.00$; $1 \mathrm{lb} ., \$ 27.00$.

## STANDARD WINTER VARIETIES

While we prefer the Spring Flowering for late greenhouse planting, the Winter class does flower earlier and in some sections is preferred even for outdoor planting. The 12 best varieties are indicated by a dot ( $\bullet$ ).

## PINK, ROSE and SALMON

Boon. Deep salmon-rose.

- Ball Rose Queen. Extra long-stemmed and large-flowered clear rose-pink. One of the finest winter varieties.
- Ball Rose Supreme. Large wavy flowers of bright silvery rose. Good stems and free flowering.
- Ball Salmon. Fairly deep salmon-pink; an excellent producer. Bridesmaid. Delightful silvery pink. Long stemmed.
Daphne. Soft salmon-pink on cream. Large flowered.
- Hiawatha. Strong growing, large flowered deep rose.

Laddie Imp. Long stemmed, fairly light rose-pink.
Mother Machree. Large coral-rose flowers; semi-duplexed.
New Ball Rose. Free flowering, bright rose.
Sequoia. Large-flowered salmon-rose.
Tops. Extra large, wavy flowered, light salmon-rose.

## ORANGE and RED

- Ball Orange Supreme. Bright, clear orange with no rose shading.
- Fiesta. Brilliant scarlet-cerise; the finest winter red. Redwood. Large flowered, deep velvety crimson.
Sparks. The finest poppy-scarlet.
- Treasure Island. Large, wavy flowers of golden orange.


## WHITE

- Ball White. The finest long stemmed pure white; white-seeded.

Gardenia. Long stemmed pure white for spring.
Hope. Fine black seeded white.
White Harmony. Similar to Hope; black seeded.

## LAVENDER, BLUE and PURPLE

Avalon. Large, mid-blue flowers on long stems.
Bacchus. Deep maroon; large flowered.

- Ball Blue Supreme. Rich mid-blue. Large flowers and a good producer.
Harmony. Early flowering lavender.
Michigan. Clear lavender.
Mrs. Hoover. Early mid-blue.
- Rhapsody. Extra large flowered, deep rosy lavender.

Top Hat. Deep bright violet-blue.

- Triumph. Long-stemmed, rich lilac-mauve; very well liked.
- Twilight. A bright clear lavender.

Prices all above standard winter varieties, each: $1 / 2$ oz., 35 c ; 1 oz ., 55c; 4 ozs., $\$ 1.65$; 1 lb., $\$ 6.00$.

## MIXTURES

- 12 Best Mixture. Our own formula mixture of the 12 best. $1 / 2$ oz., $35 \mathrm{c} ; 1 \mathrm{oz}$., $55 \mathrm{c} ; 4$ ozs., $\$ 1.65$; $1 \mathrm{lb} ., \$ 6.00$.
Ball Early Mixture. Carefully balanced mixture of winter varieties. $1 / 2 \mathrm{oz} ., 30 \mathrm{c} ; 1 \mathrm{oz} ., 50 \mathrm{c} ; 4$ ozs., $\$ 1.50$; $1 \mathrm{lb} ., \$ 5.50$.


## COLLECTIONS

$1 / 2$ oz. each of the above " 12 Best" (dotted) named varieties for $\$ 3.80$.
1 oz. each of the above " 12 Best" (dotted) named varieties for $\$ 6.10$.

## Spring Peas <br> 350 seeds per oz.

## CUTHBERTSON STRAIN

This class is midway in blooming date between the Winter and Summer types, and is the preferred kind for spring greenhouse flowering. Don't sow before October for this purpose. They are also widely planted for outdoor use being a week or two earlier than the Summer class.

## PINK, ROSE and SALMON

- Billy. Bright cerise-rose on salmon; very showy.
- Carol. Attractive clear pink on white ground; salmon shading. Doris. Deep cherry-rose. Extra strong growth with fine stems. Evelyn. Extra long stemmed, soft salmon-pink.
- Lois. Light rose-pink, similar in color to Ball Rose Queen.


## RED

Coline. Vivid, intense scarlet.

- Jimmy. Rich, deep cherry-red.


## LAVENDER, BLUE and PURPLE

- Frank G. Fine soft rosy lavender. One of the best.

Hazel. Soft, light Princess Blue shade.
Jessie. Rich lavender-mauve.

- Tommy. Clear mid-blue. A popular commercial color.


## WHITE

- Janet. Large frilled white. Black seeded.


## MIXTURE

- Mixture. Balanced according to demand for each color.

Prices above 13 Cuthbertson varieties, each: $1 / 2 \mathrm{oz}, 35 \mathrm{c} ; 1 \mathrm{oz}$, 55c; 4 ozs., $\$ 1.65$; $1 \mathrm{lb} ., \$ 5.00$.


William Zvolanek, originator of the Floribunda Sweet Peas, looking over his seed crop.

## FLORIBUNDAS <br> Originator's Seed

Developed from the sensational Multifloras (longer, stronger stems with as many as 6 and 7 blooms), the Floribunda Class is a spring flowering Sweet Pea. It branches freely with long, strong stems, as many as 6 and 7 blooms, and has other fine characteristics of the Multiflora line.
Our past season's trials definitely indicate that the Floribundas are superior to other strains for spring greenhouse or outdoor use in our locality.

| White Blush <br> Purple <br> Lilac <br> Carmine-Rose | Lavender Rose-Pink Light Pink Mid-Blue | Scarlet Mixture |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { Prices above } \\ & 4 \text { ozs., } \$ 9.00 ; \end{aligned}$ | $\begin{aligned} & 1 / 20 \text { oz., } \$ 1 \\ & 00 . \end{aligned}$ | oz., \$2.75; |

## Summer Peas

350 seeds per oz.

Sow in bands or pots in late winter. Grow cold after germination and plant out in early spring as soon as soil can be worked.

## PINK, ROSE and SALMON

- Ball Shrimp-Pink. A pleasing soft shrimp-pink. Vigorous growth and long stems make this outstanding.

Maytime. A bright golden cerise with large flowers and long stems.

- Pinkie. Finest large flowered rose-pink; long stemmed and a heavy producer.
Sweet Afton. Strong growing bright silvery pink. An excellent variety.


## WHITE

Gigantic. Excellent, pure white; black-seeded. - Snow White. The finest clear white; black-seeded.

## LAVENDER, BLUE and PURPLE

- King Lavender. Exceptionally fine, clear even lavender with long, strong stems. Excellent growth.
Olympia. Deep purple.
- Windsor Blue. A supremely fine mid-blue. Its clear even color, stem length, and flower size set it apart.


## RED

- Welcome. An intense sunproof scarlet of vigorous growth. Fine flower size and stem, and a heavy producer.


## MIXTURE

- Ball Best Mixture. Composed only of the best varieties in proportion to their commercial value.


## 7 larists' Binnias

( 2500 to 4000 seeds per oz.)

## GIANT CACTUS

Blaze. (New.) AIL-AMERKA (a) SGIFCTON See color illustration, opposite page. A combination of fiery mandarin-red and scarlet-orange in the Giant Cactus type. Unique and distinct.
Tr. pkt., $75 \mathrm{c} ; 1 / 4 \mathrm{oz} ., \$ 1.25 ; 1 \mathrm{oz} ., \$ 3.75 ; 4 \mathrm{ozs} ., \$ 12.50$.
Eskimo. (New.) Large, loosely ruffled flowers open creamy white, turn to white as they mature. Not as strong a grower as Mixture.
Tr. pkt., 75c; $1 / 4$ oz., \$1.25; 1 oz., \$3.75; 4 ozs., \$ 12.50.
Sunny Boy. (New.) Large buttercup-yellow flowers with the ruffled petals typical of this class.
Tr. pkt., 75 c ; $1 / 4 \mathrm{oz} ., \$ 1.25 ; 1 \mathrm{oz} ., \$ 3.75 ; 4 \mathrm{ozs} ., \$ 12.50$.

- Burpee Hybrids (Cactus-Flowered Hybrids). See opposite page. 21 in . One of our finest Zinnias. Extra large, fully double flowers with large ruffled petals. A well balanced mixture of colors, mostly pastels.
Tr. pkt., 60c; $1 / 4$ oz., $\$ 1.00$; 1 oz., $\$ 3.00 ; 4$ ozs., $\$ 9.00$.
Floradale Scarlet. 21 in. Large, fully double scarlet flowers with lacy, ruffled petals characteristic of the Cactus type Zinnia. This is the best performing of the Cactus varieties in our trials.
Tr. pkt., $30 \mathrm{c} ; 1 / 4 \mathrm{oz} ., 50 \mathrm{c} ; 1 \mathrm{oz}, \$ 1.50 ; 4 \mathrm{ozs}, \$ 4.50$.
Riverside Beauty. 18 in. Large, double, soft coral-rose color with lacy, ruffled petals of the Cactus type. Somewhat less vigorous than Burpee Hybrids.
Tr. pkt., 40c; 1/4 oz., 75c; 1 oz., \$2.50; 4 ozs., $\$ 7.50$.


## FANTASY TYPE

The fairly large flowers have informally curled and twisted petals which produce an attractive novelty effect.

Star Dust. A bright deep golden yellow.
Wildfire. Dazzling scarlet; a striking brilliant color.
Rosalie. Intense rose.
Mixture. Formula mixture of all colors in this class.
Prices above 4, each: tr. pkt., 30c; $1 / 4$ oz., 60c; 1 oz., $\$ 1.80$.

## CRAZY QUILT

## Flower Seed Mixture

## Half Tall Annuals Mixed

A formula mixture of half tall annuals. Over 50 different varieties, blended for continuous blooming throughout the summer.

$$
\begin{gathered}
1 \text { oz., 30c; } 4 \text { ozs., } 95 \mathrm{c} ; \\
1 \text { lb., } \$ 2.80 .
\end{gathered}
$$

## LITHOGRAPHED RETAIL or PREMIUM PACK-

 ETS including a liberal amount of seed. 1000 packets printed with your name for $\$ 38.00$. (No discount or return. No orders for less than 1000).
## GIANT MAMMOTH

For sheer flower size you can't beat these Giant Mammoth Zinnias -not quite as fully petaled as the Dahlia-flowered varieties, but the colors are very bright.

Brightness. Bright, clear rose-pink.
Cherry Queen (Cerise Queen). Brilliant cherry-rose.
Daffodil Improved. Clear canary-yellow.
Enchantress. Light pink; darker center.
Golden Queen. Bright golden yellow.
Isabellina. Creamy yellow.
Lavender Queen. Medium rosy lavender.
Miss Wilmott. Pleasing, soft pastel pink.
Orange King. A brilliant orange with scarlet shading.

- Purity. The best white in large-flowered Zinnias.

Rose Queen. Deep rose; a striking color.
Scarlet Queen. Intense bright scarlet.
Violet Queen. Deep violet-purple.
Mixture. A balanced formula mixture of all Giant Mammoth varieties.
Prices above 14, each: tr. pkt., 25c; $1 / 4$ oz., 45c; $1 / 2$ oz., 75c; l oz., \$1.25; 4 ozs., $\$ 3.75$; 1 lb., $\$ 13.50$.
COLLECTION. We offer one trade packet each of the above 13 named varieties for $\mathbf{\$ 2 . 6 0}$.

## LILLIPUTS

Lilliput Zinnias never fail to attract interest as a bedding subject because of their interesting flower formation and free flowering habit. For cut flowers, the stems can be lengthened by some cloth or greenhouse shading. Flowers about the size of average buttontype Pompons.
Black Ruby. Deep maroon.
Canary Gem
Crimson Gem
Golden Gem

- Lilac Gem
- Pink Gem $\quad$ - Formula M
Formula Mixture. All colors.
Prices above 13 , each: tr. pkt., 20c; $1 / 4$ oz., 40c; $1 / 2 \mathrm{oz} ., 70 \mathrm{c}$; 1 oz., $\$ 1.25$; 4 ozs., $\$ 3.75$; 1 lb., $\$ 12.00$.
COLLECTION. Tr. pkt. of each of the 12 named Lilliput varieties for $\$ 2.00$.


## PUMILA TYPE

"CUT-AND-COME-AGAIN." Between the Giants and Lilliputs in size.

## Canary-Yellow

## Salmon-Rose

Pinkie. A pleasing soft pink.
Spun Gold. Butter-yellow.
Prices above 7, each: tr. pkt., 20c; $1 / 4 \mathrm{oz} ., 35 \mathrm{c} ; 1 \mathrm{oz} ., \$ 1.00$; 4 ozs., \$3.35.

## MISCELLANEOUS VARIETIES

Gracillima (Red Riding Hood). Freely produces large numbers of small, bright crimson flowers. Fine for bedding. Tr. pkt., 25c; $1 / 4 \mathrm{oz}$, 50c; 1 oz ., $\$ 1.50$.
Linearis. A heat-resistant, free-blooming subject for edging and rock garden work. Compact ( $6-8 \mathrm{in}$.), early flowering, with single, bright orange flowers.
Tr. pkt., 35c; $1 / 4 \mathrm{oz}$., $\$ 1.25$; 1 oz., $\$ 3.75$.

## See page 58 for Dahlia-Flowered Varieties.



MISCELLANEOUS VARIETIES, Continued

- Persian Carpet Pitamerica al shtion Pictured above. 16 in. A greatly improved Haageana type Zinnia with well rounded form and over-all height of about 16 inches. Very floriferous, with all the natural assets of Zinnias easy to grow, heat loving, and colorful. Tr. pkt., 50c; $1 / 4 \mathrm{oz} ., \$ 1.50 ; 1 \mathrm{oz} ., \$ 4.50$.
- Peppermint Stick. Peppermint Stick is a significant improve. ment over previous strains of striped-petaled Zinnias (which have been largely rejected because of small flower size or low percentage of striped blooms). It produced at least $60 \%$ striped plants in our trials last year. The striated petals give a very pleasing and unusual effect. Medium sized flowers with many combinations of red, white, yellow, pink, orange and purple shades. Especially nice for cut-flower arrangements.
Tr. pkt., 35c; $1 / 4$ oz., 75c; 1 oz., $\$ 2.25$; 4 ozs., $\$ 7.00$.
Early Wonder, Finest Mixed. Medium sized double flowers in shades of red, rose and orange are carried on $10-12 \mathrm{in}$. basebranching plants. Extra early; fine for short season locations. only. Tr. pkt., 25c; $1 / 4$ oz., 50c; 1 oz., $\$ 1.50$.
Cupid Mixture. Dwarf, extra small-flowered type for borders and rock gardens. Tr. pkt., 25c; 1/4 oz., 50c; 1 oz., \$1.50.
Haageana Double Hybrids. See Persian Carpet.


LILLIPUT FORMULA MIXTURE


GIANT CACTUS BLAZE
(See opposite page)

The Giant Cactus Zinnias are increasingly popular. Be ready for your share of sales.

## 7 larists' Binnias <br> ( 2500 to 4000 seeds per oz.)

DAHLIA-FLOWERED
Among the largest Zinnia flowers. Tall and long-stemmed for cutting. Best all-purpose Zinnia.

- Canary Bird. A bright, clear canary-yellow.
- Crimson Monarch. Large flowered, deep crimson-red.
- Dream. An attractive lavender.
- Eldorado. Unusually attractive salmon-apricot.
- Exquisite. Fine, light rose with deep cerise center.
- Golden Dawn. Clear golden yellow. Extra large flowers. Golden State. A rich orange-yellow; varies some. lllumination. Deep rose, dark center. Darker than Exquisite. Luminosa. Bright pink suffused with salmon.
Meteor. Rich, deep amaranth-red. A striking color.
- Oriole. Orange and gold.


Purple Prince. Deep purple; large flowered.

- Scarlet Flame. Bright scarlet.

Will Rogers. Scarlet; shade lighter than Crimson Monarch.
Prices all Dahlia-Flowered Zinnias, each: tr. pkt., 30c; $1 / 4$ oz., 50c; $1 / 2 \mathrm{oz}$., 85c; 1 oz ., $\$ 1.35$; 4 ozs., $\$ 4.00$; 1 lb ., $\$ 14.50$.
COLLECTION. We furnish a collection consisting of 1 tr. pkt. each of these 15 varieties for $\$ 3.75$.

## DAHLIA-FLOWERED MIXTURES

- Gold Medal Mixture. We believe this is the finest complete mixture of large-flowered Zinnias available. This is not a fieldgrown mixture, but it is carefully blended by formula from first class cut flower colors and varieties in direct proportion to
- Indian Summer Mixture. Bright reds, yellows and oranges predominate to make up this fine assortment of "Indian Sum-
- Pastel Shades Mixture. A formula mixture of the lighter colors

Prices above 3 mixtures, each: tr. pkt., 30c; $1 / 4 \mathrm{oz} ., 50 c ; 1 / 2 \mathrm{oz}$.,

## NOTES ON ZINNIA CULTURE

For Cutting: Some protection by cloth or a greenhouse will produce long-stemmed, large-flowered Zinnias which make excellent cut-flower material. Either the Dahlia-Flowered or the Lilliputs are O. K. for this. An outdoor sowing as late as July 1 in our latitude will produce a fine crop of cut Zinnias outdoors before frost.

For Bedding: Always popular for their ease of culture and fine, vivid colors, Zinnias should account for a

Don't neglect the novelty value of the small-flowered Lilliput type, the immense size of the Giant Mammoths.

Warning: Zinnias are native to warm temperatures and need $65^{\circ}$ minimum-better, $70^{\circ}$-to germinate satis-

## Perennials

We recommend sowing perennials in spring. Germination will be better than during the heat of midsummer and the larger plants produced will winter over more satisfactorily. In addition, if sowing is done in January or early February, quite a few will bloom the first season.
We feel that every grower should include at least a few perennials in his outdoor planting. They get along admirably with little care, and many make really profitable cut flowers.

## ACHILLEA

- Filipendula, Parker's Variety (Cloth of Gold). 225,000 S. Large heads of golden yellow flowers on long stems; fine for cutting. - The Pearl (Ptarmica). 175,000 S. 30 in. The standard double white for cutting.
Prices above 2, each: tr. pkt., 30c; 1/8 oz., 70c; $1 / 4$ oz., \$1.25.


## ACONITUM

## (Monks Hood)

Napellus. 10,000 S. Dark blue; does best in partial shade. Tr. pkt., 30c; $1 / 4$ oz., 80c.

## ALSTROEMERIA <br> (Lily of Peru)

Chilensis. 1500 S . Shades of pink, rose and red. Medium tall. Germination erratic. Tr. pkt., 55c; $1 / 4 \mathrm{oz} ., \$ 1.65$; 1 oz., $\$ 5.00$.

## ALYSSUM

$30,000 \mathrm{~S}$. The two varieties following are perfectly hardy with us and make fine, free flowering rock garden or border plants.

- Saxatile Compactum (Gold Dust). 12 in. Flowers early May. Rich golden yellow. Tr. pkt., 20c; $1 / 4 \mathrm{oz} ., 35 \mathrm{c} ; 1 \mathrm{l}$ oz., $\$ 1.00$. Saxatile Silver Queen (Sulphureum). Light lemon-yellow. Tr. pkt., 30c; $1 / 4$ oz., $\$ 1.00$; 1 oz., $\$ 3.00$.


## ANCHUSA

Dropmore Strain. (Italica). 1100 S. 5 ft . Nice blue for cutting. Tr. pkt., 20c; $1 / 4$ oz., 60c; 1 oz., \$1.80.
Myosotidiflora. 10,500 S. 12 in. May flowering, forget-me-notblue. Seed should be placed in refrigerator for 72 hours before sowing.
Tr. pkt., 60c; 1/8 oz., \$1.35; 1/4 oz., \$2.50; 1 oz., \$8.50.

## ANEMONE

St. Brigid Mixed. $37,000 \mathrm{~S}$. Choice long-stemmed mixture of brilliant colors. Tr. pkt., 55c; 1/4 oz., \$1.10; $1 \mathrm{oz} ., \$ 3.25$.
Pulsatilla (European Pasque Flower). Beautiful violet-purple flowers on 12 -inch plants which are covered with silky hairs. Blooms in April-May; likes a dry location.
Tr. pkt., 40c; 1/8 oz., 70c; 1/4 oz., \$1.20.

## ANTHEMIS

Kelwayi (Hardy Marguerite). 85,000 S. 3 ft. Yellow Daisy flowers produced all summer. Tr. pkt., 20c; 1 oz., 70c.

## AQUILEGIA

(Columbine)
$15,500 \mathrm{~S}$. Though not well adapted for shipping, well grown Columbines are of definite cut-flower value for retail growers. Not at all difficult to force either. Pot up from the field the first year plants, storing in a cold house or frame until about February 1. Start in a low temperature, gradually increasing to around $50^{\circ}$.

Alpina. 18 in. Mid-blue, shaded purple. Short spurs.
Tr. pkt., 40c; $1 / 4$ oz., \$1.10; 1 oz., \$3.25.
Coerulea (Rocky Mountain Columbine). 18 in. Sky-blue with white corolla. Tr. pkt., 40c; $1 / 4 \mathrm{oz} ., \$ 1.10 ; 1 \mathrm{oz}$. , $\$ 3.25$.
Copper Queen. 2 ft . Copper-red shades with straw-yellow corolla. Tr. pkt., 55c; 1/8 oz., \$1.65; 1/4 oz., \$3.00.
Crimson Star Hybrids. 18 in. About $90 \%$ dark red with white corolla. Tr. pkt., 60c; 1/8 oz., \$1.75; $1 / 4 \mathrm{oz}$., \$3.00.


AQUILEGIA CRIMSON STAR HYBRIDS

Longissima Yellow. 2 ft . Delicate, pale yellow with extra long (4-in.) spurs. Tr. pkt., 60c; $1 / 1.6 \mathrm{oz} ., \$ 2.50 ; 1 / 8 \mathrm{oz} ., \$ 4.75$.
Longissima Mixed. 2 ft . A variety of attractive shades in this extra long-spurred class. Tr. pkt., 60c; $1 / 16$ oz., $\$ 2.00$.
Long Spurred Mixture. A well balanced blend with large flowers and long spurs. Based on our trial ground observation, this is the preferred mixture.
Tr. pkt., 40c; $1 / 4 \mathrm{oz} ., \$ 1.10 ; 1 \mathrm{oz} ., \$ 3.25$.

## McKANA'S GIANT

(New.) All-AMERIGA SHICTION Large, extra long-spurred flowers 3 to 4 inches across in a gay mixture of colors. One of the showiest of all Columbines.
$1 / 16$ oz., \$1.50; 1/s oz., \$2.75; 1/4 oz., \$5.00; $1 \mathrm{oz} ., \$ 16.00$.

Mrs. Nicholls. 2 ft . Large-flowered, clear deep blue. Tr. pkt., 50c; $1 / 8 \mathrm{oz} ., \$ 1.50 ; 1 / 4 \mathrm{oz} ., \$ 2.75 ; 1 \mathrm{oz} ., \$ 9.00$.

- Mrs. Scott Elliott's Mixture. 2 ft . An excellent long-spurred mixture. Tr. pkt., 40c; $1 / 4 \mathrm{oz} ., \$ 1.10 ; 1 \mathrm{oz}$., $\$ 3.25$.
Rose Queen. 18 in . Rose with white corolla.
Tr. pkt., 40c; $1 / 40$ oz., \$1.10; 1 oz., \$3.25.
Snow Queen. 2 ft . Creamy white flowers.
Tr. pkt., 40c; 1/4 oz., \$1.10; 1 oz., \$3.25.


## ARABIS <br> (Rock Cress)

- Alpina Snowcap. $150,000 \mathrm{~S} .6$ in. Dwarf, compact plants with dense masses of shining snow-white flowers. Blooms very early in spring. Tr. pkt., 40c; $1 / 4 \mathrm{oz} ., 80 \mathrm{c} ; 1 \mathrm{l}$ oz., $\$ 2.75$.
Alpina. 12 in. White. Tr. pkt., 25c; $1 / 4$ oz., 55c; 1 oz., $\$ 1.80$. Spring Charm (Blepharophylla). Carmine. Semi-hardy. This variety should be wintered over in frames. Will bloom in April. May. Tr. pkt., 50c.


## PERENNIALS—Continued

## ARMERIA <br> (Thrift)

Formosa, Large-Flowered Hybrids. 12,000 S. 2 ft .
Tr. pkt., 40c; 1/8 oz., 75c; 1/4 oz., \$1.40; 1 oz., $\$ 4.25$.
Alpina. $32,000 \mathrm{~S}$. Dwarf, bright rose.
Tr. pkt., 75c; 1/16 oz., \$2.75.
Maritima Splendens (Statice Armeria) , 17,500 S. 12 in. Bright
lilac-rose. Graceful evergreen foliage.
Tr. pkt., 60c; 1/8 oz., \$1.50.

## GLORY OF HOLLAND

Ball-shaped deep pink flowers about $1 \frac{1}{2}$ inches in diameter, carried on straight, wiry stems 2 feet long. Fine for cutting and blooms throughout the summer.
Tr. pkt., 60c; $1 / 8$ oz., $\$ 2.00$.

## ARTEMISIA

Silver Plume (Lactiflora). 650,000 S. Silvery foliage; creamy blooms. For cutting.
Tr. pkt., 40c; $1 / 16 \mathrm{nz}$., 75c; $1 / 4 \mathrm{oz} ., \$ 2.25$.

## ASCLEPIAS

Tuberosa. 4500 S . Fine orange for cutting. Requires well drained location. Freezing over winter helps germination. Tr. pkt., 30c; $1 / 4$ oz., 90 c ; $1 \mathrm{oz} ., \$ 3.00$.

## ASPARAGUS

Willow Spray (Verticillatus). 600 S. Completely hardy, summer green material. Finely cut foliage. Requires 3 years for best results. Tr. pkt., 55c; 1/2 oz., \$1.35; l oz., \$2.50.

## ASTER

Hardy Large-Flowered Mixture. 17,500 S. About 4 ft . tall. Fall flowering. A perfectly hardy and attractive assortment. Tr. pkt., 55c; 1/8 oz., \$1.25; 1/4 oz., \$2.25.
Alpinus, Finest Mixed. $22,000 \mathrm{~S}$. About 15 in . tall. Lavender, blue and white flowers. Tr. pkt., 55c; 1/8 oz., \$1.10.

## AUBRIETIA

Large-Flowered Hybrids. (Monarch Strain.) 150,000 S. 6 in. Low growing, matlike plants; similar to Arabis but with flowers in a wide range of colors from lilac to purple.
Hendersoni. Deep purple.
Leichtlini. Carmine-rose.
Prices above 3, each: tr. pkt., 55c; $1 / 8$ oz., $\$ 1.10$.
Baby's Breath. See Gypsophila, pages 32 and 62; also Euphorbia Corollata, page 62.

## BAPTISIA

Australis (False Indigo). 1700 S . Sprays of pea-shaped indigoblue flowers. 3 ft . Tr. pkt., 30c; 1 oz., 80c.

## BELLIS

Perennis (Monstrosa). $135,000 \mathrm{~S}$. We have a fine new double strain of this popular English Daisy, much used for early summer bedding and for spring combinations. Though a perennial, it is commonly grown as an annual like Pansies.
Red Rose White

Prices above 3, each: tr. pkt., 60c; $1 / 8 \mathrm{oz} ., \$ 2.00 ; 1 / 4 \mathrm{oz} ., \$ 3.75$. Mixture. Tr. pkt., 60c; $1 / 8$ oz., $\$ 1.80$; $1 / 4$ oz., $\$ 3.00$.

## BROOM

Hybrids Mixed. 5500 S. 4 to 5 ft . Vigorous, hardy shrubs in a range of bright colors including all shades of pink, orange, terra cotta and crimson. Flowers second season from seed.
Tr. pkt., 50c; $1 / 8$ oz., $\$ 1.25$; $1 / 4$ oz., $\$ 2.35$.

## CAMPANULA

CARPATICA. 350,000 S. 12 in . Perennial. Wide, upright cupshaped flowers are borne on slender, erect stems. Plants are leafy clumps.
Blue. Tr. pkt., 30c; 1/8 oz., 80c; 1/4 oz., \$1.45.

- Cullinmore Mixture. Contains many new colors in this dwarf class. Tr. pkt., 60c; 1/8 oz., \$1.50; $1 / 4 \mathrm{oz} ., \$ 2.80$.


## ROCK GARDEN BLEND

Desirable, low-growing kinds in a wide range of Campanula colors. Tr. pkt., 75 c .

MEDIUM CALYCANTHEMA (Cup-and-Saucer Type)。120,000 S. 3 ft . Biennial. Both this and the following (Medium Single) are easily forced for spring greenhouse flowering either as pot plants or for cutting.

## Dark Blue Light Blue Rose White Mixture

Prices above 5, each: tr. pkt., 25c; $1 / 4$ oz., 50c; 1 oz., \$1.75.
MEDIUM SINGLE (Canterbury Bells). 135,000 S. 3 ft. Biennial.
Dark Blue Light Blue Pink White Mixture
Prices above 5, each: tr. pkt., 20c; $1 / 4$ oz., 30c; 1 oz., 90c. MEDIUM DOUBLE (Canterbury Bells). 102,000 S.

Formula Mixed. Tr. pkt., 30c; $1 / 4$ oz., 80c; 1 oz., $\$ 2.40$. PERSICIFOLIA. 340,000 S. 30 in . Perennial. 1-inch, bell-shaped flowers on stiffiy erect stems. 15 -inch spikes.

## White Blue

Prices above 2, each; tr. pkt., 40c; $1 / 8$ oz., $\$ 1.00$; $1 / 4$ oz., $\$ 1.85$.
Telham Beauty. 30 in . Large bells of china-blue.
Tr. pkt., 40c; $1 / 8$ oz., $\$ 1.00$; $1 / 4$ oz., $\$ 1.85$.
PYRAMIDALIS. $250,000 \mathrm{~S} .5 \mathrm{ft}$. Perennial.
Mixture. Tr. pkt., 40c; 1/8 oz., \$1.00; 1/4 oz., \$1.85.
Perennial Candytuft. See Iberis, page 64.

## CAMPANULA

 CALYCANTHEMA (Cup and Saucer Canterbury Bells)

PERENNIALS-Continued

## CARNATION

GRENADIN (Hardy Carnation). 14,000 S. 20 in . Good for cut ting.
King of the Blacks. Darkest red.
Golden Sun - Pink © Red White Mixture
Prices above 6, each: tr. pkt., 60c; $1 / 4$ oz., $\$ 2.00$; 1 oz., $\$ 6.50$.
Annual Carnations. See page 23.

## CATANANCHE

Coerulea. $16,000 \mathrm{~S} .24 \mathrm{in}$. Nice everlasting for cutting, with light lavender-blue, Centaurea-like flowers produced freely first year from seed. Tr. pkt., 25c; $1 / 40 \mathrm{oz} ., 50 \mathrm{c} ; 1 \mathrm{oz} ., \$ 1.75$.

## CENTAUREA

Montana. 1600 S. 24 in . Large cornflower-blue flowers. Tr. pkt., 25c; $1 / 4$ oz., 50c; 1 oz., \$1.50.
Centaurea Cyanus. See page 25.

## CERASTIUM

Tomentosum (Snow-in-Summer). 42.000 S .10 to 12 in . An excellent dwarf bedding perennial with silvery foliage and small white flowers. Tr. pkt., 30c; 1/4 oz., 60c; 1 oz., $\$ 1.80$.

## CHEIRANTHUS

(Siberian Wallflower)

- Golden Bedder. 19,000 S. 18 in . Large, deep golden yellow. Tr. pkt., 20c; $1 / 4$ oz., 40c; 1 oz., \$1.20.
Orange Queen. 18 in. Free flowering brilliant orange
Tr. pkt., 20c; 1 oz., 50c; 4 ozs., \$1.50.
Annual Wallflower. See page 51.


## CHRYSANTHEMUM

## - GLORY MIXTURE

9,000 S. Our finest mixture of hardy Chrysanthemums with an exceedingly wide range of brilliant colors. Contains Korean and Arcticum Hybrids, Azaleamums, Indicums and Morifoliums. Tr. pkt., \$1.00; 1/8 oz., \$2.50; 1/1 oz., \$4.50.

Korean Hybrids. $60,000 \mathrm{~S}$. Single and semi-double types in a good color range. Some bloom rather late for localities with early frost dates. Tr. pkt., $\$ 1.00 ; 1 / 8$ oz., $\$ 2.50 ; 1 / 4 \mathrm{oz} ., \$ 4.50$.

## CLEMATIS

Paniculata. 4500 S. White-flowered climber.
Recta Mandschurica. 7500 S. Panicles of fragrant white flowers on 4 - to 5 - ft . plants.
Prices above 2, each: tr. pkt., 75c; $1 / 8$ oz., $\$ 1.50 ; 1 / 4 \mathrm{oz} ., \$ 2.75$.

## COREOPSIS

$11,000 \mathrm{~S}$. The long, graceful stems and rich, golden yellow color give this plant real value for cutting. We find it best treated as a biennial.

- Sunburst. 24 in. A fine semi-double strain, with 2 -inch golden yellow flowers. Tr. pkt., 20c; $1 / 4 \mathrm{oz} ., 35 \mathrm{c} ; 1 \mathrm{oz} ., \$ 1.10$. Mayfield Giant. 30 in . Extra large deep golden yellow. Single. Tr. pkt., 20c; $1 / 4 \mathrm{oz}$., 30c; 1 oz., 90c.


## CYCLAMEN

## NEAPOLITANUM PERENNIAL MIXED

(New.) Shades of rose and white flowers about $1 / 3$ the size of annual Cyclamen. Free flowering on 8-10 inch stems, in August and September. For best results sow early fall and carry seedlings through the first winter under glass, transplanting out to partially shaded area in spring.
100 seeds, $\$ 1.00 ; 1000$ seeds, $\$ 3.00$.

## DAISY, SHASTA <br> (Chrysanthemum Maximum)

## -G. MARCONI

$18,000 \mathrm{~S}$. The largest flowered and finest double Shasta Daisy strain. Long-stemmed.

Tr. pkt., 60c; 1/8 oz., \$1.65; $1 / 4$ oz., $\$ 3.00$.

Double Fringed (Diener's) 24,000 S. A reselected strain producing about $50 \%$ good double types that should be propagated by division. Tr. pkt., 60c; $1 / 16$ oz., $\$ 1.35$; $1 / 4 \mathrm{oz}$., $\$ 4.25$.
June Marguerite. $40,000 \mathrm{~S}$
Tr. pkt., 25c; $1 / 4 \mathrm{oz}$, 50 c ; 1 oz., $\$ 1.50$.
Mayfield Giant. $21,000 \mathrm{~S}$. Quite large-flowered; end of June.

- Alaska. 21,000. S. The standard Shasta Daisy. July.

Conqueror. $21,000 \mathrm{~S}$. Giant late white. Late July.
Prices above 3, each: tr. pkt., 20c; $1 / 4 \mathrm{oz} ., \mathbf{3 5 c} ; 1 \mathrm{oz} ., \$ 1.00$.

## DELPHINIUM

(See page 63)

## DIANTHUS

28,000 S. Easily grown from seed and flowers May to July the second season from sowing. Germinates best in soil temperature of $65^{\circ}$ to $75^{\circ}$.

Allwoodi Alpinus Mixed. 8 to 10 in . $1^{112} 2$-inch single flowers in shades of pink. Early June.
Tr. pkt., 35c; 1/8 oz., \$1.00; $1 / 4 \mathrm{oz} ., \$ 1.75$.

## DELTOIDES ERECTA

6 in. May-June flowering. A dwarf rose "Maiden Pink." A fine substitute for creeping Phlox for rock gardens and borders. Tr. pkt., 35c; 1/s oz., \$1.00; 1/4 oz., \$1.75.

Latifolius Atrococcineus. $38,000 \mathrm{~S}$. Clusters of bright crimson flowers on individual 20 -inch stems. Fine for cutting. May-June. Tr. pkt., 35c; $1 / \mathrm{s}$ oz., $\$ 1.00$; $1 / 4 \mathrm{oz} ., \$ 1.75$; 1 oz., $\$ 5.25$.
Loveliness. 15 in . Large, fringed and curled pastel and white flowers. Quite fragrant. Originator's seed.
Tr. pkt., 50c; $1 / 16$ oz., $\$ 1.50 ; 1 / 4$ oz., $\$ 4.50$.
Winteri. $16,400 \mathrm{~S}$. Large single flowers in a mixture of pink and rose with dark centers borne on compact 15 -inch plants. Long blooming period. June-July.
Tr. pkt., 60c; $1 / 8$ oz., $\$ 1.50$; $1 / 2 \mathrm{oz} ., \$ 5.00$.


## PERENNIALS—Continued

## DIANTHUS, Continued

PLUMARIUS (Clove Pink).
Cyclops. Rose and pink with crimson ring.
Tr. pkt., 40c; 1/4 oz., \$1.10.
Double Mixture (Scoticus Florist Strain). Various shades of pink, rose, and white; some self colors, others with bright crimson zone. $1 \frac{1}{2}-\mathrm{in}$. flowers on $12-15 \mathrm{in}$. stems.
Tr. pkt., 35c; 1/8 oz., \$1.00; 1/4 oz., \$1.75; 1 oz., \$5.25.
Single Mixture. 20 in . Free flowering, sweet scented, pinks and white. Spreading. Tr. pkt., 20c; $1 / 4 \mathrm{oz} ., 40 \mathrm{c} ; 1 \mathrm{oz} ., \$ 1.45$.
BARBATUS (Sweet William). 24 in . Early June flowering. Perfectly hardy, flowering second season from seed. All of the following named varieties are single except where noted.
Holborn Glory. Striking combination of crimson center with white border. Very uniform. 18 inches tall. Clusters $21 / 2$ to 3 inches.

- Newport Salmon (Pink Beauty). 13 in. A particularly rich pastel salmon-rose shade. Very attractive.
Purple Beauty. 17 in. A rich, deep color.
Scarlet Beauty. 17 in . Well named, intense scarlet-red.
Giant White. 17 in . Ours is an extra large flowered strain.
Single Mixture
- Double Mixture
- Auricula. Choice single mixture with very large flowers showing a clearly defined eye. Sold out till fall 1955.
Prices above 8, each: tr. pkt., 35c; $1 / 4 \mathrm{oz} ., 75 \mathrm{c}$; $1 \mathrm{oz} ., \$ 2.60$.
- Single Midget Mixed. Very fine, neat alpine and rock plant. 4 to 6 in . with dense heads of single Sweet William flowers. Tr. pkt., 60c; $1 / 4 \mathrm{oz}$. , $\$ 1.50$; 1 oz , $\$ 4.75$.
Double Midget Crimson. A separate color selected from the popular Double Midget Mixed. True to type.
Tr. pkt., 50c; $1 / 4 \mathrm{oz} ., \$ 1.50 ; 1 \mathrm{oz} ., \$ 4.50$.
- Double Midget Mixed. 6 to 8 in .

Tr. pkt., 40c; $1 / 4$ oz., 90c; 1 oz., $\$ 3.00$.
Annual Dianthus. See page 30 .

## DICENTRA

Spectabilis (Bleeding Heart). 6000 S. 32 in . Rosy red flowers. Tr. pkt., \$1.50; $1 / 32$ oz., $\$ 2.20$; $1 / 46$ oz., $\$ 4.00$.
Eximia (Plumy Bleeding Heart). 16,000 S. Dwarf, 12 in. Rose. pink. Tr. pkt., 40c; $1 / 40 \mathrm{oz}$., $\$ 1.10$.

## DICTAMNUS

Froxinella (Gas Plant.) 1700 S. 30 in. Pink with dark veins. Tr. pkt., 30c; $1 / 4 \mathrm{oz} ., 55 \mathrm{c} ; 1 \mathrm{l}$ oz., $\$ 1.85$.

## DIGITALIS

GLOXINOIDES (Foxglove). 180,000 S. 4 ft . Biennial. This is an extra large flowered strain.
Purple Rose White Giant Shirley Mixture
Prices above 4, each: tr. pkt., 25c; $1 / 4$ oz., 60 c; 1 oz., $\$ 2.15$.

## DORONICUM

Caucasicum, Magnificent. 18.000 S. 2 ft . Targe yellow Ges bera-like flowers with long stems. Keep well when cut.
Tr. pkt., \$1.00; 1/s oz., \$2.25.

## ECHINOPS

Ritro (Globe Thistle). 688 heads to oz. Metallic blue flower heads $1 \frac{1}{2}$ to 2 in . across are borne on 2 - to $3-\mathrm{ft}$. plants. Can be dried for winter bouquets.
Tr. pkt., 40c; $1 / 4$ oz., $\$ 1.10$; $1 \mathrm{oz} ., \$ 3.25$.
Edelweiss. See Leontopodium, page 64.

## EUPHORBIA

Corollata (Wild Baby's Breath). 8700 S. 24 in . Small Gypso-phila-like white flowers
Tr. pkt., 40c; 1/8 oz., \$1.25; 1/4 oz., \$2.25.
Myrsinites. 2500 S . Attractive succulent-like silvery green foliage. Each branch produces a brilliant yellow bract of leaves in May. 6-8 in. tall. Tr. pkt., 35c; 1/8 oz., \$1.00.
Polychroma. 7000 S .15 to 18 in . Bushy plants with bracts of bright yellow changing to rosy bronze.
Tr. pkt., 60c; 1ír oz., \$1.35.

FEVERFEW See Matricaria, page 65.

## GEUM

7000 S . The following two provide nice cut-flower material and are perfectly winter hardy with some protection.
Lady Stratheden. 24 in . Double golden yellow.
Mrs. Bradshaw. 24 in . Double glowing red.
Prices above 2, each: tr. pkt., 30c; $1 / 4 \mathrm{oz}$. , 90c; $1 \mathrm{oz} ., \$ 2.70$.

## GAILLARDIA

GRANDIFLORA. 9500 S . The following strains, except Goblin, are excellent cut-flower sorts.

- Dazzler. The standard fine cutting strain. Golden yellow with maroon center.
- Monarch Strain. A superior mixture of large, full-petaled flowers in various red and yellow combinations.
Prices above 2, each: tr. pkt., 30c; $1 / 4 \mathrm{oz} ., 55 \mathrm{c} ; 1 \mathrm{l}$ oz., $\$ 1.85$.
- Burgundy. Deep shade of wine-red.

Tr. pkt., 30c; $1 / 4 \mathrm{oz}, 75 \mathrm{c}$; $1 \mathrm{oz} ., \$ 2.35$.
Portola Hybrids Mixed. Large maroon-red flowers tipped with yellow. Tr. pkt., 30c; $1 / 4 \mathrm{oz} ., 80 \mathrm{c}$; $1 \mathrm{oz} ., \$ \mathbf{2 . 4 0}$.
Goblin. Forms very attractive compact plants with red and yellow bicolored flowers. Quite free flowering.
Tr. pkt., 25c; $1 / 4 \mathrm{oz} ., 75 \mathrm{c}$; 1 oz., $\$ 2.35$.
Aurea Pura. Pure yellow.
Tr. pkt., 30c; $1 / 4$ oz., 60c; 1 oz., \$2.00.
Annual Gaillardia. See page 31.
Gas Plant. See Dictamnus, at left, below.

## GILIA

Coronopifolia (Standing Cypress). 18,800 S. Heads of scarlet flowers on 5 -ft. plants. Biennial.
Tr. pkt., 30c; $1 / 8$ oz., 65c; 1/4 oz., \$1.10; 1 oz., \$3.30.

## GYPSOPHILA

$34,000 \mathrm{~S}$. Valuable for outdoor summer cutting and easily and economically grown.

- Pacifica. 42 in. Starry pink flowers in September and October. Tr. pkt., 30c; 1/4 oz., 80c; 1 oz., \$2.85.
Oldhamiana. 30 in . Feathery light pink flowers with silvery foliage. Blooms first year from an early sowing. October flow-ering-watch frost dates.
Tr. pkt., 25c; $1 / 4 \mathrm{oz} ., 75 \mathrm{c} ; 1 \mathrm{oz} ., \$ 2.50$.
PANICULATA. The regular white hardy Gypsophila. Note that double grafted varieties like Bristol Fairy are not available from seed.
- Double Snow Flake. 40 in. An improved double hardy Gypsophila. About $50 \%$ are double flowering plants.
Tr. pkt., 40c; $1 / 4 \mathrm{oz} ., \$ 1.40 ; 1 \mathrm{oz} ., \$ 4.75$.
Single White. 40 in . Tr. pkt., 25c; 1 oz., \$1.00; 4 ozs., $\$ 3.00$.
REPENS. 6 in. An attractive, hardy rock garden plant.
Rose. Tr. pkt., 30c; $1 / 4 \mathrm{oz} ., 80 \mathrm{c}$; $1 \mathrm{oz} ., \$ 2.50$.
Annual Gypsophila. See page 32.


## 'GROWER TALKS

Our GROWER TALKS is the only commercial monthly publication which is devoted exclusively to flower growing: suggestions for items to grow, sowing dates, insect disease controls, warieties, etc. Yours for 3 years for $\$ 2.50$. Binder for 24 issues of GROWER TALKS, \$1.50.

## Flarists' Delphinium

( 10,000 seeds per oz.)
If Delphinium seed is sown in January or early February, trans planted in the greenhouse and planted out in early spring, a good cut can be had the following summer.

## GIANT PACIFIC STRAINS Court Series

- Black Knight. Deep velvety blue. The darkest of all. - Blue Bird. The clearest of medium blues; white bees. Blue Jay. A brilliant true medium blue with dark bee Cameliard. Lavender and rose with white bee.
- Galahad. The finest clear white Delphinium.
- Guinevere. Excellent, light pinkish lavender; white bee.
- King Arthur. Royal violet with white bee. Exceptional size. - Percival. Large, glistening white flowers with black bees.
- Summer Skies. Light blue with attractive white bee.
- 6 Best Mix. Formula mixture of the " 6 Best" varieties.

Round Table. Contains all above plus many new colors.
Prices of above:
Originator's Seed (Vetterle \& Reinelt). An excellent strain of the Giant Pacifics kept uniform and vigorous by the originator. $1 / 2$ tr. pkt., $\$ 1.25$; tr. pkt., $\$ 2.00$; $1 / 8 \mathrm{oz}$., \$3.00; 1/4 oz., \$5.50; 1 oz., \$20.00.
Regular Seed. A satisfactory strain one generation removed from originator's seed. Grown by a reliable seed producer. Tr. pkt., $\$ 1.50 ; 1 / 8 \mathrm{oz} ., \$ 2.50 ; 1 / 4 \mathrm{oz}$., $\$ 4.50 ; 1 \mathrm{oz}$., $\$ 15.50$.

## ASTOLAT

Pale blush shades with several darker tones including a few raspberry-rose, Dark bees. Originator's seed.
$1 / 2$ tr. pkt., \$1.50; tr. pkt., \$2.25; 1/8 oz., \$4.50; $1 / 4 \mathrm{oz}$., $\$ 8.00$.

## Giant Pacific Regular Strain

Clear White. A fine clear white, large flowered.
Blue Shades. Mixture of light, medium and dark blue.
Lavender Pastel Shades. Lavender combinations with dark bees.
Mixture. All colors in this fine type.
Prices above 4, each: tr. pkt., \$1.00; $1 / 8$ oz., $\$ 2.25$; $1 / 4 \mathrm{oz}$., \$4.00; 1 oz., \$13.50.

## OTHER VARIETIES

- Belladonna Imp. (Cliveden Beauty). A carefully reselected strain of this popular light blue.
Tr. pkt., 40c; $1 / 4 \mathrm{oz} ., \$ 1.00$; 1 oz., $\$ 3.25 ; 4$ ozs., $\$ 11.00$. Belladonna. Light blue.
Tr. pkt., 35c; $1 / 4 \mathrm{oz}$., 70c; 1 oz., $\$ 2.35$.
- Bellamosum Improved. A reselected strain of this standard deep blue.
Tr. pkt., 40c; $1 / 4 \mathrm{oz} ., \$ 1.00 ; 1 \mathrm{oz}$, , $3.25 ; 4$ ozs., $\$ 11.00$.
Lamartine. Deep, bright marine-blue with white eye.
Tr. pkt., 55c; $1 / 40$ oz., $\$ 1.50 ; 1$ oz., $\$ 5.00$.
- Blackmore and Langdon Hybrids. Shades of blue with contrasting bees. A fine free-flowering hybrid strain.
Tr. pkt., 40c; $1 / 4 \mathrm{oz}$., $\$ 1.00$; 1 oz ., $\$ 3.00$; 4 ozs., $\$ 10.00$.
Sapphire. Large flowered bright blue with small golden bee. Petals have a brilliant, glossy sheen. Slightly lighter than Bellamosum. Tr. pkt., 75c; $1 / 4$ oz., $\$ 2.00$; 1 oz., $\$ 6.00$.
Wrexham or Hollyhock Strain. Extra large, tapering spikes. Tr. pkt., 55c; $1 / 4 \mathrm{oz}$., $\$ 1.75$; 1 oz., $\$ 6.00$.
Gold Medal Hybrids. Tr. pkt., 30c; $1 / 40$ oz., 55c; 1 oz., $\$ 1.75$.
Cardinale. $25,000 \mathrm{~S}$. Bright scarlet.
Tr. pkt., 40c; $1 / 4 \mathrm{oz} ., 80 \mathrm{c}$; $1 \mathrm{oz} ., \$ 2.50$.
Delphinium Chinensis. See page 30 .



## OUR "6 BEST" GIANT PACIFICS

| Galahad | Summer Skies | Black Knight <br> Blue Bird |
| :--- | :--- | :--- |
| King Arthur | Guinevere |  |

Glahad King Arthur Guinevere

## COLLECTIONS:

Originator's Seed. 1 tr. pkt. each of 6 Best, $\$ 10.80$.
Regular Seed. I tr. pkt. each of 6 Best, $\$ 8.00$.

## PERENNIALS—Continued

## HELIANTHEMUM

Mutabile (Sun Rose). 15,000 S. 8 to 10 in. Very attractive dwarf evergreen rock plant completely covered with blooms in mixed colors during July and August. Tr. pkt., 25 c; $1 / 4$ oz., 45 c ; 1 oz., $\$ 1.40$.

## HELLEBORUS

Niger (Christmas Rose). 3600 S. Attractive $2 \frac{1}{2}-\mathrm{in}$. white flowers; basal foliage. Seed should be frozen before sowing or sown outdoors in fall for best results.
Tr. pkt., 30c; 1/4 oz., 60c; 1 oz., \$1.80.
Choice Mixed. (Hybrids.)
Tr. pkt., 60c; 1/4 oz., \$1.20; 1 oz., \$3.60.

## HESPERIS

MATRONALIS (Sweet Rocket). $15,000 \mathrm{~S}$. Sweet-scented flowers on 3 -foot plants.

## Violet White

Prices above 2, each: tr. pkt., 20c; $1 / 4$ oz., 35c; 1 oz., $\$ 1.00$.

## HEUCHERA

SANGUINEA (Coral Bells). 750,000 S. 24 in .
Splendens. Crimson.
Hybrida Mixed. Shades of red through rose to white.
Prices above 2, each: tr. pkt., 60c; 146 oz., \$1.75; 1/8 oz., \$3.25.

## HIBISCUS

Mallow Marvels Mixed. 7000 S. 4 ft . Ours is a very showy extra large-flowered strain.
Tr. pkt., 25c; $1 / 4 \mathrm{oz} ., 60 \mathrm{c}$; 1 oz., $\$ 1.80$.

## HOLLYHOCK

Imperator Improved. 2700 S . Choice double crested "Tuberous Begonia-Flowered" mixture.
Tr. pkt., 30c; $1 / 4 \mathrm{oz} ., 60 \mathrm{c}$; 1 oz ., $\$ 2.00$.
Allegheny Mixed. Single and semi-double types.
Tr. pkt., 25c; $1 / 4 \mathrm{oz} ., 50 \mathrm{c}$; 1 oz., $\$ 1.50$.

## -TRIUMPH

Extra large, fully double flowers in unusual, delicate art shades. Most blooms are attractively fringed. May be handled as an annual-if sown indoors in February and transplanted to the open in spring, all plants will flower nicely the same summer.
Tr. pkt., 30c; 1/4 oz., 60c; 1 oz., \$1.80.

CHATER'S DOUBLE. 3100 S . The standard double.
Chamois Lilac Beauty Newport Pink Scarlet Deep Rose Sulphur-Yellow White Black Mixture of All.
Prices: above 9, each tr. pkt., 35c; 1/4 oz., 65c; 1 oz., \$2.00.
Annual Hollyhocks. See page 32.

## IBERIS

(Hardy Candytuft)
Gibraltarica. $11,500 \mathrm{~S} .12 \mathrm{in}$. Large flowered lilac. Tr. pkt., 25c; $1 / 4 \mathrm{oz}$., 50c; 1 oz., $\$ 1.50$.
Sempervirens. 12 in . White flowers in late May. Seedlings flower second season. Tr. pkt., 55c; $1 / 4 \mathrm{oz} ., \$ 1.35 ; 1 \mathrm{oz} ., \$ 4.75$.
Jucunda. 4 in. Pink flowers.
Tr. pkt., 50c; $116 \mathrm{oz} ., \$ 1.50 ; 1 / 4 \mathrm{oz} ., \$ 5.40$.

## INCARVILLEA

Grandiflora Brevipes. 6000 S. Brilliant dark rose flowers. Delavayi. 24 in . Large, Gloxinia-like, rosy purple flowers. Prices above 2, each: tr. pkt., 60c; $1 / 4$ oz., $\$ 1.20$.

## IRIS

Dichotoma (Vesper Iris). 7000 S. Assorted colors; fragrant. Tr. pkt., 35c; 1/4 oz., 70c; 1 oz., \$2.10.
Kaempferi. A wide variety of colors with many doubles.
Tr. pkt., 40c; $1 / 4$ oz., 75c; 1 oz., $\$ 2.35$.

## LATHYRUS

LATIFOLIUS (Hardy or Everlasting Sweet Pea). 500 S. Abun dant source of short-stemmed flowers. 7 ft .

| Pink Beauty | White Pearl | Red | Mixture |
| :---: | :---: | :---: | :---: |
|  |  |  |  |

## LAVANDULA

- Munstead Strain. 32,000 S. 12 in . Freely produces large sweetscented flowers a month earlier than the common Lavender. An improved Vera. Tr. pkt., 40c; 11/4 oz., \$1.25; 1 oz., \$3.75.


## LEONTOPODIUM

Alpinum (Edelweiss). $275,000 \mathrm{~S}$. Attractive rock garden plant. Small greenish white flowers.
Tr. pkt., 60c; $1 \not 16 \mathrm{oz}$., $\$ 1.10 ; 1 / 8 \mathrm{oz}$., $\$ 2.00$.

## LIATRIS

(Gay Feather)
9500 S. Excellent cut flowers with long, decorative, bold spikes. All are easily grown.

- Pycnostachya. Extra long-stemmed-3 to 5 ft . with long, 15 to 18 -inch flower spikes of rosy purple. Finest cut-flower kind. Scariosa Purple. 4 ft . Extra large individual flower heads of rosy purple are carried on long, loosely set spikes.
Prices above 2, each: tr. pkt., 35c; $1 / 4 \mathrm{oz} ., \$ 1.00$; $1 \mathrm{oz} ., \$ 3.00$.
- September Glory. Tall growing with purple spikes. Scariosa type. Tr. pkt., 60c; 1/4 oz., $\$ 2.00$; 1 oz ., $\$ 6.00$.


PERENNIALS-Continued

## LILIES

White Queen. (Canadian hardy strain.) 8200 S . This is the largest and finest seed propagated Lily we know of. Produces a plentiful quantity of real quality flowers in 16.18 months from seed. Pure white.
$1 / 2$ tr. pkt., 75c; tr. pkt., \$1.25; 1/8 oz., \$2.75; 1/4 oz。, \$5.00. Candidum (Madonna Lily). Tall pure white.
Tr. pkt., \$1.25; 1/8 oz., \$2.75; 11/4 oz., \$5.25; 1 oz., \$16.50.
Formosanum, Giant Flowered. 8200 S. An improved form of Philippine Lily. White flowers.
Tr. pkt., 60c; $1 / 4$ oz., \$1.25; 1 oz., \$3.75; 4 ozs., \$13.00.
Henryi. Orange, spotted brown. Seed should be frozen in flats for four weeks at about $30^{\circ}$ for best germination.
Tr. pkt., 75c; 114 oz., \$2.00; 1 oz., \$6.00.
Regale (Regal Lily). 6500 S . The large, showy flowers are pure white inside with yellow base; reverse of petals is tinged with pink. Tr. pkt., 25c; $1 / 4$ 02., 60c; 1 oz., $\$ 1.50 ; 4$ ozs., $\$ 5.00$.
Tenuifolium, Coral Lily. Freely produces medium sized flowers of brilliant coral-red. 18 to 20 in . tall. May flowering
Tr. pkt., 60c; $1 / 4$ oz., \$1.50; 1 oz., $\$ 4.50$.

## LINUM

Perenne (Perennial Flax). 8500 S. 2 ft . Attractive blue flowers on slender stems. Tr. pkt., 20c; 1 oz., 60c.
Flavum Compactum. 8 in. Golden yellow flowers with dark green foliage. Ideal for rock gardens.
Tr. pkt., 40c; 1/4 oz., 80c; 1 oz ., \$2.50.
Collinum. Dwarf growing, bright blue.
Tr. pkt., 40c; 1/4 oz., 80c; 1 oz., \$2.50.

## LOBELIA

Cardinalis (Cardinal Flower). 725,000 S. 36 in. Bright cardi-nal-red. Tr. pkt., 40c; 1/8 oz., 90c; 1/2 oz., \$2.70.

## LUNARIA

BIENNIS (Honesty or Money Plant). 1500 S.
White Mixture
Price: above 2, each: tr. pkt., 25c; $1 / 4$ oz., 40c; 1 oz., $\$ 1.40$.

## LUPINE

POLYPHYLLUS (Hardy Lupine). Fine for cutting. Requires a well-drained location and thrives best in cool climate.

## - RUSSELL STRAIN

1000 S. Long, closely set spikes of extra large florets in rich self colors and unusual bicolors. Developed by a famous English specialist.
RESELECTED STOCK (Originator's packets): 24 seeds, 40c; 65 seeds, 65 c; 150 seeds, $\$ 1.25 ; 350$ seeds, $\$ 2.50$. REGULAR SEED:

Tr. pkt., 40c; $1 / 4$ oz., 65c; 1 oz., \$2.10; 4 ozs., $\$ 6.50$.

MISCELLANEOUS POLYPHYLLUS VARIETIES. 1450 S.
Dark Blue Rose White
Prices above 3 , each: tr. pkt., 35c; $1 / 4 \mathrm{oz}$. $65 \mathrm{c} ; 1 \mathrm{oz}, \$ \mathbf{2 . 0 0}$.

- Harkness Regal Mixture. The standard fine hybrid mixture. Tr. pkt., 20c; 1/4 oz., 35c; 1 oz., \$1.10.


## LYCHNIS

- Chalcedonica (Maltese Cross). 64,000 S. 36 in. Scarlet. Tr. pkt., 25c; 1/4 oz., 45c; 1 oz., \$1.40.
Rose. 5 in. Brilliant rose, for rock gardens.
Tr. pkt., 50c; 1/8 oz., \$1.50.
Forrestii. 15 in . Mixture of rose, lilac, white and red. Excellent cut flower and bedding plant.
Tr. pkt., 35c; $1 / 40 \mathrm{oz}, 80 \mathrm{c} ; 1 \mathrm{oz}, \$ 2.40$.


## MATRICARIA

## (Feverfew)

CAPENSIS. 145,000 S. 18 in. grown outside; 3 to 5 ft . when grown in greenhouse. Sowings made during January will provide a welcome cut the same summer.

## - BALL DOUBLE WHITE IMPROVED

This strain has been carefully reselected for fully double flowers, and our own trials show it to be well over $90 \%$ true, double, imbricated blooms. Nearly all of the single and anemone types have been removed.
Tr. pkt., \$1.00; 1/16 oz., \$2.00; 1/4 0z., \$6.00; 1 oz., \$ 18.00.

Double White, Regular. A regular strain of double and semidouble Matricaria with some showing yellow centers.
Tr. pkt., 40c; $1 / 8 \mathrm{oz} ., \$ 1.10 ; 1 / 4 \mathrm{oz}_{\mathrm{o}}, \$ 2.00 ; 1 \mathrm{oz} ., \$ 6.00$.
ALL-DOUBLE DWARF. 8 to 10 in . Uniformly dwarf and compact plants which are a solid mass of ball-shaped flowers slightly over $1 / 2$-inch across. Very attractive for border work and makes an excellent pot plant.

- Golden Nuggets. Rich butter-yellow.
- Snow Puffs. Pure white; very effective.

Prices above 2, each: tr. pkt., 35c; $1 / 16$ oz., 60c; $1 / 4 \mathrm{oz} ., \$ 2.00$.
Foxglove. See Digitalis, page 62.

## MYOSOTIS

(Forget-Me-Not)

- Blue Bird (Oblongata). 31,500 S. 12 in. Standard blue for spring greenhouse flowering.
Tr. pkt., 40c; $1 / 4$ oz., 90c; 1 oz., \$3.25.
Palustris Semperflorens. $47,500 \mathrm{~S}$. Dwarf blue. 12 in. Flowers from early spring until autumn.
Tr. pkt., 40c; 1/4 oz., 90c; 1 oz., \$3.25.
VICTORIA. $42,000 \mathrm{~S}$. A dwarf, compact strain. 6 to 8 in.
Dark Blue Rose White Dwarf Mixed

Prices above 4, each: tr. pkt., 40c; $1 / 8$ oz., 90c; $1 / 4$ oz., $\$ 1.65$; 1 oz., \$4.90.
ALPESTRIS. $42,500 \mathrm{~S}$. Biennial.
Blue Eyes. Early flowering bright blue with white eye.
Tr. pkt.. 60c; $1 / 4$ oz., \$1.50; $1 \mathrm{oz} ., \$ 4.75$.

- Royal Blue (Indigo Blue). 12 in. Deep rich blue.

Tr. pkt., 40c; $1 / 4 \mathrm{oz}, 85 \mathrm{c}$; $1 \mathrm{oz} ., \$ 3.00$.
Myosotis Ball Early. See page 38.

## NEPETA

Mussini (June-flowering Catnip). 52,000 S. 12 in. Neat bushes with light blue flowers; both foliage and flowers are aromatic. Tr. pkt., 30c; 1/4 oz., 90c; 1 oz., \$2.70.

## OENOTHERA

Youngi (Sundrop). 350,000 S. 18 in. Large yellow blooms.
Tr. pkt., 25c; 1/4 oz., 65c; 1 oz., \$2.00.
Missouriensis. 12 in. Large flowered yellow.
Tr. pkt., 30c; $1 / 4 \mathrm{oz} ., \$ 1.20$.
Painted Daisy. See Pyrethrum, page 66.

## PENTSTEMON

## AVALON HYBRIDS

$15,000 \mathrm{~S} .3 \mathrm{ft}$. Spikes of fine, large flowers in an extremely wide and unusual range of colors. The result of crossing two distinct species.
Tr. pkt., 40c; 1/8 oz., 80c; $1 / 4$ oz., \$1.50.

Annual Pentstemon. See page 39.


## PERENNIALS-Continued

## PRIMULA

VERIS. 33,000 S. A very useful class for spring pot work. Plants lifted from outdoors in fall will make specimen pot plants from February on.

- Colossea. Extra large flowers ( $11 / 2$ to 2 in .) on long stiff stems. Remarkable range of unusual colors.
Tr. pkt., $\$ 1.25$; $1 / 8$ oz., $\$ 3.00$; $1 / 4 \mathrm{oz}$., $\$ 5.25 ; 1 \mathrm{oz} ., \$ 17.00$. Giant Munstead Strain. The standard strain for bedding; in shades of yellow.
Tr. pkt., \$1.25; 1/b oz., \$3.00; $1 / 4$ oz., $\$ 5.25 ; 1 \mathrm{oz}$., $\$ 17.00$.
- Polyanthus Mixture. (Unwin's strain.) 12 in .

Tr. pkt., \$1.00; 1/8 oz., \$2.25; 1/4 oz., \$4.25; 1 oz., \$12.50.

- Giant Monarch Strain. A fine large-flowered mixture.

Tr. pkt., \$1.25; 1/8 oz., \$3.00; $1 / 4 \mathrm{oz}$. , \$5.25; $1 \mathrm{oz} .$, \$17.00.
MISCELLANEOUS HARDY PRIMULAS
Giant Crimson Giant Yellow

## Giant White

Prices above 3 , each: tr. pkt., 80 c ; $1 / 16 \mathrm{oz} ., \$ 1.85 ; 1 / 8 \mathrm{oz}$., $\$ 3.25$.
Blue Flowered. Tr. pkt., $\$ 1.00 ; 1 / 32 \mathrm{oz} ., \$ 2.75 ; 1 / 16 \mathrm{oz} ., \$ 5.25$.

## DENTICULATA

(New.) Large heads of flowers. Colors vary from white to deep rosy lilac.
Tr. pkt., $\$ 1.00$; $1 / 16 \mathrm{oz} ., \$ 2.40$; $1 / 4 \mathrm{oz} ., \$ 9.00$.

Cashmeriana. Ball-shaped heads of rich purple flowers with yellow centers. Tr. pkt., \$1.00; $1 / 16 \mathrm{oz}, \mathrm{S}$ \$2.40; $1 / 4 \mathrm{oz}$, , $\$ 9.00$. Vulgaris (True Yellow English Primrose). 19,000 S. 6 in. Tr. pkt., 60c; $1 / 4$ oz., $\$ 1.75$; 1 oz., $\$ 6.50$.
Japonica. Crimson, rose and pink flowers borne in whorls on 6 - to 9 -in. stems. Tr. pkt., 40c; 1/8 oz., \$1.00.
Annual Primulas. See page 42.

## PYRETHRUM

ROSEUM (Painted Daisy). $18,000 \mathrm{~S}$. The standard hardy cutflower class. Will make an excellent showing with a minmum of care.
Atrosanguineum. A popular dark crimson strain.
Robinson's Dark Crimson. Giant flowered, dark red.
Rose. Single pink flowers.

- Robinson's Mixture. Large single mixture.

Semi-Double Mixture. Large-flowered and free blooming.
Prices above 5, each: tr. pkt., 60c; $1 / 4 \mathrm{oz} ., \$ 1.50 ; 1 \mathrm{oz} ., \$ 4.75$.

- Double Mixture. The percentage of large flowers, with double row of petals, exceeds that of any other strain. Note, however, that 2 years' growth is required to produce the finest flowers in any double Pyrethrum.
Tr. pkt., 60c; $1 / 8$ oz., $\$ 1.50 ; 1 / 4 \mathrm{oz} ., \$ 2.75 ; 1 \mathrm{oz}$., $\$ 8.25$. Parthenifolium Aureum (Golden Feather). Dwarf, yellowgreen foliage. Tr. pkt., 25c; $1 / 4 \mathrm{oz} ., 60 \mathrm{c}$; 1 oz ., $\$ 1.80$.


PYRETHRUM ROBINSON'S DARK CRIMSON

## PERENNIALS-Continued

RUDBECKIA
Purpurea (Echinacea). 7000 S. 4 ft . Reddish purple flowers. Tr. pkt., 35c; 1/4 oz., \$1.00; 1 oz., \$3.50.

## SALVIA

Patens. 3800 S. 30 in. Navy blue hardy Salvia.
Tr. pkt., 60c; 1/4 oz., \$1.50; 1 oz., \$4.75.

## SAPONARIA

Ocymoides 5500 S .12 in . Trailing rock plant; rose-pink flowers. Tr. pkt., 30c; $1 / 4$ oz., 75c; 1 oz., $\$ 2.25$.

## SCABIOSA

2400 S. Excellent large-flowered perennial cut-flower material. Seed germination sometimes slow.
CAUCASICA. 30 in . Flower heads up to 3 in . across.
Goldingensis. Large flowered, fine deep lavender. Tr. pkt., 60c; 1/4 oz., \$1.75; 1 oz., \$5.25.
Perfecta. Improved large flowered form of this lilac-lavender strain. Tr. pkt., 35c; $1 / 40 \mathrm{oz}, 80 \mathrm{c}$; $1 \mathrm{oz} ., \$ 2.60$.

- House Hybrids. Large flowers ranging from white to deep blue. Tr. pkt., 40c; $1 / 4 \mathrm{oz}$., $\$ 1.10$; 1 oz., $\$ 3.75$.


## SEDUM

Acre (Golden Carpet). 3 in. A very nice extra dwarf evergreen. Small, light yellow flowers produced in June. Very strong, hardy grower. Tr. pkt. ( 3000 seeds or more), 50c.
Rock Garden Blend. Many species with various colors and forms make up this interesting mixture.
Tr. pkt. ( 3000 seeds or more), 50c.

## STATICE

Perennial Statice are very hardy, make good cut-flower material and can be dried and dyed.
Caspia. $175,000 \mathrm{~S} .30 \mathrm{in}$. Seedlings flower second season. Lilac. Tr. pkt., 30c; 1/4 oz., 80c; 1 oz., $\$ 2.75$.

- Dumosa. $19,000 \mathrm{~S} .18 \mathrm{in}$. Dense clumps of silvery gray flowers. Tr. pkt., 40c; 1/4 oz., \$1.00; 1 oz., $\$ 3.00$.
- Latifolia (Sea Lavender). 40,000 S. 30 in . Standard blue perennial Statice. Tr. pkt., 30c; $1 / 4$ oz., 65c; 1 oz., $\$ 2.00$.
Perezi. 14,000 S. Flowers in large lavender heads first year from seed. Tr. pkt., 30c; 1/4 oz., 75c; 1 oz., \$2.25.
Annual Statice. See page 50 .
Stock, Brompton or Winter. See page 53.


## STOKESIA

Cyanea (Stokes' Aster). 3300 S. 16 in. Large blue flowers Tr. pkt., 35c; 1/4 oz., \$1.00.

## THALICTRUM

Dipterocarpum (Meadow Rue). 12,000 S. 3 to 4 ft . Rosy purple clusters of flowers in early June.
Tr. pkt., 30c; ¼ oz., 75c; 1 oz., \$2.35.
THERMOPSIS
Caroliniana. 6500 S .3 to 5 ft . Long panicles of yellow peashaped flowers. Tr. pkt., 30c; 1/4 oz., 75c; loz., $\$ 2.35$.

## TRITOMA

## (Red Hot Poker)

$20,000 \mathrm{~S}$. Attractive long spikes from late summer until frost. 3 to 4 ft .

- Pfitzer's Red. Large brilliant red.

Mirabilis. Yellow and orange shades.
Prices above 2, each: tr. pkt., 30c; $1 / 4$ oz., 60c; 1 oz., $\$ 2.00$.

## TROLLIUS

8000 S . Allow seed to stand outdoors over winter for good germination or soak in hot water 30 minutes before sowing. Plants require moist soil.
Ledebouri, Orange (Globe Flower). The standard variety. 2 ft .
tall. Tr. pkt., 60c; 1/8 oz., \$1.25; $1 / 8$ oz., $\$ 2.25$.
Europaeus (Golden Ball). Late yellow.
Tr. pkt., 40c; $1 / 8$ oz., $\$ 1.10$; $1 / 4 \mathrm{oz}$., $\$ 2.00$.
Hybrids Mixed. Beautiful variations in both form and shades.
Tr. pkt., 40c; 1/8 oz., \$1.50; 1/4 oz., \$2.70.

## VERONICA

Spicata, Dwarf Mixed (Speedwell). 250,000 S. Showy, easily grown plants; brightly colored.
Tr. pkt., 35c; $1 / 4 \mathrm{oz} ., 90 \mathrm{c}$; $1 \mathrm{oz} ., \$ 2.70$.

## VIOLA

CORNUTA. $24,000 \mathrm{~S}$. Miniature Pansies. Extra free-flowering and effectively used for bedding. Perfectly hardy.
Apricot. Prefer Chantreyland.
Tr. pkt., 55c; 1/8 oz., \$1.15; $1 / 4 \mathrm{oz} ., \$ 2.10 ; 1 \mathrm{oz} ., \$ 6.50$.
Arkwright Ruby. Maroon with dark center. Bright color.
Tr. pkt., 60c; 1/8 oz., \$1.60; 1/4 oz., \$2.90; 1 oz., $\$ 9.00$.

- Blue Perfection. Large flowered clear medium blue.

Tr. pkt., 60c; $1 / 8 \mathrm{oz}$, , $\$ 1.20$; $1 / 4 \mathrm{oz}$. , $\$ 2.25$; $1 \mathrm{oz} ., \$ 6.50$.

- Chantreyland. Extra large flowered true apricot.

Tr. pkt., 60c; $1 / 8 \mathrm{oz}$., $\$ 1.15$; $1 / 4$ oz., $\$ 2.20$; 1 oz ., $\$ 6.50$.
Firmament. Free blooming, clear sky-blue
Tr. pkt., 60c; $1 / 16$ oz., \$1.15; $1 / 8$ oz., \$2.20.
Jersey Gem. Deep orchid; large flowered and attractive.
Tr. pkt., 60c; 11⁄6 oz., \$1.15; 1/8 oz., \$2.25.
King Henry. Rich violet-blue with lavender center and small yellow eye.
Tr. pkt., 60c; $1 / 8 \mathrm{oz}$., \$1.15; $1 / 4 \mathrm{oz}$., \$2.20; 1 oz., $\$ 6.50$.

- Lutea Splendens. Clear golden yellow. Tr. pkt., 60c; $1 / 4 \mathrm{oz}$., $\$ 1.60$; 1 oz ., $\$ 5.25$.
Papilio. Blue and white combinations. Extra dwarf and freeflowering. Tr. pkt., 40c; $1 / 4 \mathrm{oz}$., $\$ 1.25$; 1 oz., $\$ 4.25$.
Puck. Yellow and purple.
Tr. pkt., 40c; $1 / 4$ oz., \$1.35; 1 oz, $\$ 4.25$.
- White Perfection. Small pure white.

Tr. pkt., 40c; $1 / 4 \mathrm{oz} ., \$ 1.35$; $1 \mathrm{oz} ., \$ 4.25$.
Scottish Mixed. Mostly solid colors in shades of white, yellow, blue and purple. Larger blooms than our regular Large Flowered Mixture.
Tr. pkt., 40c; 1 亿16 oz., $\$ 1.15 ; 1 / 4$ oz., $\$ 3.35$; 1 oz., $\$ 10.00$.

- Large-Flowered Mixture. Mixture of large-flowered varieties. Tr. pkt., 40c; $1 / 4 \mathrm{oz} ., \$ 1.35$; l oz., $\$ 4.25$.


## "JUMP-UPS"

These small, but free flowering Violas make excellent bedding and rock garden plants, blooming continuously from early spring to late fall.
Black Imp (Nigra). Small, velvety, coal-black flowers.
Tr. pkt., 60c; $1 / 8 \mathrm{oz} ., \$ 1.35$; $1 / 4$ oz., $\$ 2.50$.

- Blue Elf. (Improved Johnny Jump Up). 43,000 S. Threecolored blooms of deep violet, light blue and gold are freely produced on low-growing plants. SOLD OUT until fall 1955. Tr. pkt., 60c; $1 / 8$ oz., $\$ 1.35$; $1 / 4$ oz., $\$ 2.50$.
- Helen Mount. A richly colored combination of violet, lavender and canary-yellow. Very free flowering with narrow bushy foliage. Tr. pkt., 60c; 1/8 oz., \$1.35; $1 / 4 \mathrm{oz} ., \$ 2.50$.
ODORATA. The popular fragrant "English Violet."
Semperflorens. Deep blue. Tr. pkt., 40c; 1/4 oz., \$1.40.


## YUCCA

Hardy Varieties Mixed. 1800 S. Striking plants of exotic appearance. Many varieties are included in this blend.
Tr. pkt., 30c; 1/4 oz., 75c; 1 oz., $\$ 2.25$.

## "GROWER TALKS

Our GROWER TALKS is the only commercial monthly publication which is devoted exclusively to flower growing: suggestions for items to grow, sowing dates, insect disease controls, varieties, etc. Yours for 3 years for $\$ \mathbf{2 . 5 0}$. Binder for 24 issues of GROWER TALKS, \$1.50.


# q. Florist Grade Lawn Grass Seed 

We are not specialists in Lawn Grass Seed; however, we are conscious of the fact that florists are very particular seed buyers. Our Merion Blue Grass and all our Mixtures are the finest grades available within their price range.

Remember that Lawn Grass can be purchased for a few cents per pound or for several dollars per pound. The initial cost of
seed is higher where a permanent turf of lasting beauty is desired. Our Lawn Seed is handled in very attractive one-pound resale containers and colorful five-pound bags. Bulk lots are shipped in easy to handle fifty-pound burlap bags. When ordering please state if you wish 1 - lb. cartons, $5-\mathrm{lb}$. bags, or bulk. Otherwise we will use our own judgment. 1 to 10 lbs. are postpaid; over 10 lbs. will be shipped F.O.B. West Chicago, cheapest way.

## MERION BLUE GRASS

This is the grass that has taken the country by storm. Actually the most economical to use, wherever drought resistance, deep green color, close mowing, and permanence are the prime objective. Supply of Merion Blue Grass is good this year, bringing this fine grass well within the reach of everyone. Merion Blue does best sown hy itself. With this in mind, we are not
offering it in a mixture. Best time to sow is very early spring and late summer. 1 lb . will sow from 500 to 1000 square feet. Caution: allow up to 1 month for germination.
Merion Blue Grass. 1 to $10 \mathrm{lbs} ., \$ 3.10$ per lb.; over 10 lbs ., $\$ 2.75$ per lb. Suggested resale price: $\$ 3.95$ per lb.

## FLORIST FORMULA MIXTURES

## (Use 1 lb . for $200 \mathrm{sq} . \mathrm{ft}$.)

## SUNNY LOCATIONS

Here is a formula with Kentucky Blue Grass as the base and two other fine grasses in proportion. Very suitable also for light shade. Tops in its class. 1 to 10 lbs ., $\$ 1.40$ per lb .; 11 to 100 lbs ., $\$ 1.15$ per lb. Write us for prices on larger quantities. Suggested resale price: $\$ 1.85$ per lb .

## SHADY LOCATIONS

Suitable for all places shaded by trees, shrubs and buildings, this mixture will make a permanent turf of good quality. Contains a large amount of Fescue and shade-loving Trivialis Blue Grass.
1 to $10 \mathrm{lbs} ., 95 \mathrm{c}$ per lb .; 11 to 100 lbs ., 75 c per lb . Write us for prices for larger quantities. Suggested resale price: $\$ 1.10$ per lb.

## VILLAGE GREEN

Our Economy Blend, will make a good lawn quickly and on any soil. The ingredients are clean and well blended, but cannot be depended upon to make a permanent turf. Does not contain Timothy.
1 to 10 lbs., 60 c per 1 lb . 11 to 100 lbs ., 45 c per lb . Write us for prices for larger quantities. Suggested resale price: 75 c per lb .

ALL ABOVE PRICES NET

# Nem Bedding Plant Containers 

## BY-THE-DOZEN "PAKS" VERSUS FLATS

"Why should I use these small containers when it lowers my unit of sale?" asks the alert bedding plant grower.

Here is the answer as we see it.
Bedding plant growers would, of course, prefer to sell larger quantities of bedding plants. But many of your retail customers don't want to buy individual varieties of bedding plants in quantities of three, four, or five dozen, any more than the average consumer wants to buy eggs, or oranges, or anything else three dozen at a time. The fact that bedding plants are still sold out of pots shows the importance of this "dozen or less" market.

The by-the-dozen "pack" containers are a compromise between pots and large flats. Selling from pots is expensive and in many markets inefficient. Selling from large flats either overloads the customer with too many of one variety and color or consumes selling time digging and wrapping plants-with all the headaches that involves.

The customer's interest is always served! If your customers want to buy plants by the dozen, someone will eventually offer them that way. Don't neglect the interest of Mrs. Jones, who wants "a few white Petunias to plant up a porch box." Offer her a three-dozen-plant flat for $\$ 2.50$, and unless you're a supersalesman you'll drive her to another outlet where she can buy the quantity she wants. Incidentally, with a good variety of types and colors of bedding plants to offer in small packs (all priced substantially under a dollar) available for her to choose from, you can suggest other subjects for other locations in her yardedging, shade, background planting. This way you will quite likely increase your total sale.

Bedding plants are not difficult to sell if offered in "salable" quantities. Be sure your container is adapted to your best potential buyers.


## MARKET-PAK

A new, more efficient 12-plant pack, MARKET-PAK has several important advantages over other similar multiple-plant containers.

Larger. Dimensions $71 / 2 \times 51 / 2 \times$ $21 / 2$ inches deep-allows $31 / 2$ square inches per plant for 12 plants, total approximately 42 square inches. This generous spacing permits stocky plants and real quality growth.
Easy to handle. A special design of the nesting edge completely eliminates the sometimes objectionable tendency of fabricated containers to stick together.
Lighter for handling and shipping costs. Weight per 200 units packed, approximately 20 pounds.
Attractive, brick-red color, smooth finish-goes well in any display arrangement.
More durable-hard pressed wood pulp product contains no material toxic to plant growth.

Better drainage. One slot where each side joins the bottom insures satisfactory drainage for all parts of container.
Market-Paks are less expensive. In quantities of $10,000-\mathrm{a}$ frac tion over 4 c each.

We have an unlimited supply of Market-Paks this season and can guarantee immediate delivery. You will not have to wait.

| PRICES MARKET-PAK |  |  |
| :---: | :---: | :---: |
| Quantity Per 1000 | Quantity | Per 1000 |
| 200. 800 ( 200 for \$11.00) \$55.00 | 10,000-24,800 | \$41.00 |
| 1000-4800 ............ 46.00 | 25,000-49,800 | 39.00 |
| 5000-9800 ........... 43.50 | 50,000 up | 36.60 |
| Packed in units of 200. Minimum our warehouse, Franklin Park, Ill. | order 200. | F.O.B. |



Light, durable, easy to handle, inexpensive, Market-Paks are in our judgement the most efficient growingselling bedding plant container available. Market-Paks nest very efficiently for shipping (see cut at left), yet are not difficult to separate when being unpacked.


TWO OTHER "DOZEN-PLANT" CONTAINERS

## HANDI-PAK

Unfortunately there is nothing standard about the size and shape of flats in which any of the new "by the dozen" packs can be conveniently handled. For those whose present flats will better fit smaller containers, also for those who find a smaller container more readily adapted to their market, we offer HANDI-PAK.
$5 \times 51 / 2 \times 2^{1 / 2}$ inches deep, constructed of wood pulp products. Sturdy and durable. Carton of 250 weighs approximately 21 lbs . Packed in units of 250 and 500 .

## PONY PACKS

This is a unit which we offered last season and which found wide acceptance throughout the trade. Size $8 \times 4 \times 21 / 2$ inches deep. A durable plant container. Approximate weight, 34 lbs . for 250 . Packed in units of 250

PRICES HANDI-PAK AND PONY PACK

| Quantity | $\begin{aligned} & \text { Handi-Pak } \\ & \text { Per } 1000 \end{aligned}$ | Pony Pack <br> Per 1000 |
| :---: | :---: | :---: |
| 250-750 | \$57.00 | \$60.00 |
| 1000-4750 | 47.50 | 55.00 |
| 5000-9750 | 45.00 | 52.50 |
| 10,000-24,750 | 42.75 | 50.00 |
| 25,000-49,750 | 40.50 | 45.70 |
| 50,000 up | 38.00 | 42. 0 |

Minimum order 250. Prices net, F.O.B. our warehouse, Franklin Park, Ill.

## Plant tina a iffy - with IIFFY POTS

Here is a brand new (to this country), inexpensive plant container which "stole the show" at our display on Field Day last summer. Constructed in Norway (under the name Huminal Pot) of $25 \%$ wood fiber and $75 \%$ peat, Jiffy-Pots contain supplementary soluble fertilizers-nitrogen, phosphorous and potash. Available in $2^{1 / 4}$ - and 3 -inch pots, they are rigid except when thoroughly soaked and will stand considerable handling and shipping abuse.

This is an "expendable" pot-they cannot be reused. Roots grow through it very easily and become part of the pot very early in growth. We have grown bedding plants in 3 -inch Jiffies up to twelve weeks with several moves, and they have remained substantially intact
Advantages: Jiffy-Pots support phenomenal plant growth. Just why plants grow so well in Jiffy-Pots we are not sure. The soluble fertilizer contained in the pot no doubt has something to do with the bonus performance. They need less frequent waterings, as they dry out slower than other pots. Jiffy-Pots need not be removed when transplanting. Roots grow readily through the walls of the pot when the whole pot is plunged into the soil. They are extremely light for shipping-carton of $300021 / 4$ 's weighs 35 pounds. They are inexpensive-in quantities the $21 / 4$ 's are about $6 / 10 \mathrm{c}$, and the 3 's about 1 c .

Possible uses include:
Bedding Plants. Sell the plants in Jiffy-Pots. Your bedding plant customer can plant immediately or delay planting for several days, then plunge plant, pot and all, into the soil. No transplanting check.
For "Growing On" spring plants like Coleus, Geraniums, Begonias, etc., to be finished in larger pots. Jiffies need not be removed-disintegrate in soil.

For handling cut flower crops in early growth stages; Mum and Carnation cuttings in $21 / 4$. and 3 -inch pot stage. Plant Shipments. Light weight, sturdy-ideal for shipping.
Your plants will be sturdier, greener, and grow more rapidly if they are
"Planted in a Jiffy" PRICES JIFFY-POTS
Quantity
21/4-In.
Quantity Quantit
$\qquad$ 3-In.
3000 Min. Order \$23.25
1500 Min. Order
$\$ 21.00$
Per 1000
$\begin{array}{rrlr}6000-18,000 & \$ 6.75 & 3000-9000 & \$ 12.00 \\ & 6.000-24,000 & 11.00\end{array}$
$\begin{array}{llll}21,000-48,000 & 6.00 & 25,500-48,000 & 10.00\end{array}$
$21 / 4$-in. packed in units of 3000 only. 35 lbs . per unit.
3 -in. packed in units of 1500 only. 35 lbs. per unit.

Petunias (left photo). Left $3-\mathrm{in}$. clay pot, center 2 -in. clay pot, right $21 / 4$-in. JiffyPot. Note heavy growth sustained by Jiffy after 10 weeks. Petunia, Pink Sensation sown March 1, photo May 10.

Salvia (right photo). 2-in. clay pots bottom two rows, $21 / 4$-in. Jiffy-Pots top two rows. This was an eyeopener. We weighed the plants-Jiffies were almost $50 \%$ heavier after 10 weeks.


3-in. clay $21 / 4$-in. clay $21 / 4$-in. Jiffy-Pot



JIFFY-POT
Note below how freely roots penetrate walls. Marigold, 12 weeks' growth.

## BALL Veneer "PlanTrays"

These are our popular veneer PlanTrays which bedding plant growers the country over have been using for growing and selling small plants for bedding. They are now available in three types.
The Regular-No. 1-R, No. 2-R and No. 3-R-of light weight veneer for the fastgrowing plants. Each flat holds 12 plant bands.

The X-Type-No. 2-X and 3-X-made of extra heavy veneer for longer life. For use where a longer growing period or a sturdier flat is required. Each flat holds 12 plant bands. These X-Type PlanTrays can be used with or without bands.
The S-Type-Special PlanTrays-each holding 25 plant bands. For the grower selling small plants in quantity, this is the answer.
Place your orders early. State HOW TO SHIP.

## PRICES

All Prices Net, F.O.B. Midwest Factory or Franklin Park, Ill.

|  |  |  | as show | plow and 1000 - |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Size | Units of | $\begin{gathered} 0- \\ 375 \end{gathered}$ | $\begin{aligned} & 500- \\ & 975 \end{aligned}$ | $\begin{aligned} & 1000 \\ & 2450 \end{aligned}$ | $\begin{aligned} & 2500- \\ & 9950 \end{aligned}$ | $10,000$ | $\begin{gathered} 20,000- \\ I_{n} \end{gathered}$ |
| No. 1-R (holds $1213 / 4 \times 21 / 2$ bands) | .125-250 | \$46.30 | \$44.20 | \$42.30 | \$490.60 | 19,950 | ${ }_{\$ 3750}$ |
| No. 2-R (holds $122 \times 21 / 2$ bands) | 125-250 | 49.40 | 47.20 | +45.20 | +43.30 | \$31.00 | \$37.50 |
| No. 3-R (holds $1221 / 2 \times 21 / \frac{1}{2}$ bands) | 125-250 | 56.00 | 53.50 | 51.20 | 49.10 |  |  |
| No. 2-X (holds $122 \times 21 / 2$ bands) | 125 | 61.40 | 58.70 | 56.20 | 59.100 | 47.20 51.70 | 45.40 |
| No. 3-X (holds $1221 / 2 \times 21 / 2$ bands) | 125 | 69.70 | 66.60 | 63.70 | 53.90 61.10 | 51.70 58.70 | 49.80 |
| No. 4-X (holds $123 \times 3$ bands) | 125 | 76.60 | 73.20 | 70.00 | 67.20 | 68.50 | 56.50 62.10 |
| No. 1-S (holds $2513 / 4 \times 2$ bands) | 125 | 52.40 | 50.00 | 47.90 | 45.90 | 44.10 | 42.40 |
| No. 2-S (holds $252 \times 2$ bands) | 125 | 56.90 | 54.40 | 52.10 | 49.90 | 48.00 | 46.10 |
| On PlanTrays an additional c | added for | quantitie | requirin |  | shi |  |  |

# BALL BETIER PLANT BANDS 

## for Bedding Plants . . Chrysanthemums . . Perennials Nursery Stock . . Carnations . . Vegetables

Quickly opened; come completely assembled.
Rapidly filled; faster than small pots one at a time.
Much lighter to handle and store than pots.
No dirty pots to clean or sterilize.
Fit close; less watering needed.
Faster benching than bare-root transplants. Holds more soil than a pot of equal diameter.

Made of decay resisting veneer for longer life.
No wilting checks after transplanting.
Ideal to pack for the small plant shipper.
Make swell dozen-plant units in Ball PLANTRAYS for retail sales.
Bands packed in valuable greenhouse flats at no extra cost. (These flats are treated to resist decay in soil.)

Very Important! To save delay be sure to specify which way to ship-EXPRESS, FREIGHT, or TRUCK. This is important. If no instructions are given, we use our best judgement. No parcel post shipments unless customer is on rural route. Give route number. Our responsibility ceases when shipment is delivered to carrier.

Bands sold only in units as listed below. All prices are net, no cash discount, F.O.B. Midwest Factory or Chicago, Ill., and are subject to change without notice.

Price per 1000 in quantities as shown below


## BIRD VITA-BANDS

BIRD VITA-BANDS are the only nutrient-treated plant bands that eliminate any possibility of transplant shock.
VITA-BAND "H" for extra long growing periods.
VITA-BAND "D", the unique nutrient-treated, disintegrating plant band, controls root growth for short growing periods.
VITA-BAND "10", nutrient-treated, aids plant growth from seedling through time of transplant.

BIRD
Perennial Pots SOLD IN FULL CASES ONLY $5 \%$ Additional on Orders of Less Than 3 Cases

BIRD RED POTS
Bird Red Pots are designed for shipping purposes only. PRICES PER 1000 (Sold in units of 1000 only)

| SIZE |  | PRICE per M | WEIGHT per Case | QUANTITY per Case |
| :---: | :---: | :---: | :---: | :---: |
| 2 | In. | \$ 8.60 | 10 | 1000 |
| $21 / 4$ | In. | 8.60 | 12 | 1000 |
| $21 / 2$ | In. | 8.70 | 16 | 1000 |
| 3 | In. | 9.15 | 25 | 1000 |
| $31 / 2$ | In. | 12.20 | 35 | 1000 |
| 4 | In. | 14.70 | 21 | 500 |
| 5 | In. | 18.15 | 33 | 500 |
| 6 | In. | 22.25 | 48 | 500 |


| PRICES - WEIGHTS—QUANTITIES |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| SIZES | $5^{\prime \prime}$ | $5^{1} / 2^{\prime \prime}$ | $6^{1 / 2^{\prime \prime}}$ | $91 / 2^{\prime \prime}$ |
| Price <br> per M | 60.00 | 36.50 | 51.50 | 62.85 |
| Height | $5^{\prime \prime}$ | $51 / 2^{\prime \prime}$ | $61 / 2^{\prime \prime}$ | $9^{1 / 2^{\prime \prime}}$ |
| Top <br> Diameter | $8^{\prime \prime}$ | $5^{\prime \prime}$ | $6^{\prime \prime}$ | $7^{\prime \prime}$ |
| Bottom <br> Diameter | $7^{\prime \prime}$ | $4^{\prime \prime}$ | $41 / 2^{\prime \prime}$ | $51 / 2^{\prime \prime}$ |
| Approx. <br> Weight <br> per Case | 65 lbs | 33 lbs | 44 lbs | 71 lbs |
| Quantity <br> per Case | 200 | 200 | 200 | 200 |

22.25

ALL BIRD PRODUCTS are priced F.O.B. factory near Boston or our Chicago warehouse, unless otherwise stated. All prices subject to change without notice.

PRICES ON BIRD VITA-BANDS

|  | SIZES | $\mid 11 / 2 \times 11 / 2$ | $\begin{array}{\|c\|} \hline 13 / 4 \times 13 / 4 \\ \times 2^{1 / 2} \end{array}$ | $\begin{array}{r} 2 \times 2 \\ \times 21 / 2 \end{array}$ | $\underset{\times 3}{2 \times 2}$ | $\begin{array}{\|c\|} \hline 21 / 2 \times 21 / 2 \\ \times 3 \end{array}$ | $\begin{gathered} 3 \times 3 \\ \times 3 \end{gathered}$ | $\begin{aligned} & 4 \times 4 \\ & \times 3 \end{aligned}$ | $\begin{aligned} & 4 \times 4 \\ & \times 4 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { PRICE } \\ & \text { PER } \\ & M \end{aligned}$ | VB-10 | \$3.70 | \$4.00 | \$4.55 | \$5.05 | \$6.00 | \$6.90 | \$9,00 | \$11.25 |
|  | VB-D | 3.85 | 4.15 | 4.65 | 5.35 | 6.05 | 7.05 | 9.25 | 11.60 |
|  | VB-H |  | 5.45 | 5.80 | 6.90 | 7.65 | 8.50 | 10.45 | 12.90 |
| VITA. BAND 10 | QUANTITY PER CASE | 2M | 2M | 2M | 2M | 2M | IM | 500 | 500 |
|  | WEIGHT PER CASE | 31 LBS | 36 LBS | 40 LBS | 48 LBS | 59 LBS | 35 LBS | 23 LBS | 31 LBS |
| VITABAND D | QUANTITY PER CASE | 2M | 2M | 2M | 2M | 2M | 1 M | 1 M | 1 M |
|  | WEIGHT PER CASE | 21 LBS | 24 LBS | 27 LBS | 32 LBS | 41 LBS | 24 LBS | 32 LBS | 42 LBS |
| VITA. BAND H | QUANTITY PER CASE |  | 1 M | 1 M | 1 M | 500 | 500 | 500 | 500 |
|  | WEIGHT <br> PER CASE |  | 28 LBS | 32 LBS | 38 LBS | 24 LBS | 28 LBS | 37 LBS | 49 LBS |

BIRD TOM THUMB FLATS

| Combination 1 M flats 12 M Vita-Band 10 Per 1000 Sets | Sold in Units of 250 Sets only | Tom Thumb Flats |
| :---: | :---: | :---: |
| Size \#1 Size \#2 <br> 86.45 95.65 | Per Thousand | Size \#1 Size \#2 <br> 44.70 49.60 |

Printing Tom Thumb Flats Minimum quantity 1000. $\$ 6.00$ per 1000. F.O.B factory, plus cost of printing plates.

Size No. 1 holds $12-13 / 4 \times 21 / 2$ bands and
Size No. 2 holds $12-2 \times 21 / 2$ bands.
BIRD VITA-POTS (Nutrient-Treated)
price list of vita pots per thousand

| $2^{\prime \prime}$ | $21 / 4^{\prime \prime}$ | $21 / 2^{\prime \prime}$ | $3^{\prime \prime}$ | $31 / 2^{\prime \prime}$ | $4^{\prime \prime}$ | $5^{\prime \prime}$ | $6^{\prime \prime}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\$ 14.60$ | $\$ 14.95$ | $\$ 15.50$ | $\$ 17.40$ | $\$ 22.70$ | $\$ 25.70$ | $\$ 33.40$ | $\$ 44.10$ | Vegetable Seeds for 7 larists

Our vegetable seeds are of the same superior quality as our flower seeds. Don't miss out on the increased sale of vegetables this spring. With home building and the sale of home freezers at a national alltime peak, the demand for vegetables for "back-yard" planting should reach a comparable all-time high level. BE READY!
( - For easy reference, we've marked the best vegetable varieties for greenhouse forcing with a dot. All are thoroughly tested.
Band-grown vegetables mean earlier crops. Use the banded plant cut as your guide to suitable varieties for growing in Plant Bands.

## BEANS

| Bountiful. 47 days. Green bush | $\begin{aligned} & 4 \text { ozs. } \\ & \$ 0.20 \end{aligned}$ | $\begin{aligned} & \text { lilb. } \\ & \$ 0.50 \end{aligned}$ | $\begin{aligned} & 10 \mathrm{lbs} . \\ & \$ 4.50 \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| Dwarf Horticultural. "Roman Bean." Green bush | . 20 | . 50 | 4.50 |
| Golden Wax. 51 days. Yellow bush. | . 20 | . 50 | 4.50 |
| Kentucky Wonder. 65 days. Green pole | . 20 | . 50 | 4.50 |
| Stringless Green Pod. 53 days | . 20 | . 50 | 4.50 |
| Top-Crop. 48 days. New, green pen pod | . 20 | . 50 | 4.50 |
| Burpee's Bush Imp. Lima. 75 days | . 20 | . 50 | 4.50 |

## BEETS

( 1 oz. , for 60 -foot row.) Sow when ground can be worked and make successive sowings until July. Space rows 18 inches. Broadcast seeds in Ball Bands for plant sale.

Crosby's Egyptian. (Original Strain.) $\quad \$ 0.15 \quad \$ 0.50 \quad \$ 1.50$
Detroit Dark Red. (Improved Strain.) .. . 15 . $50 \quad 1.50$

- Early Wonder Tall Top. Valuable for

BEET GREENS as well as globular roots $\quad 15 \quad .50 \quad 1.50$

- Extra Early Flat Egyptian. Earliest and best for forcing or home gardens
$.15 \quad .50 \quad 1.50$


## BROCCOLI


(About 10,000 seeds per oz.) Sow in March. Space plants $36 \times 24$ ".

1 oz .4 ozs .1 lb .
Green Sprouting. Valuable all-season
"cut and come again" strain for home
garden or market ........................ $\$ 0.40$ \$1.35 \$4.00
De Cicco. 60 days. Earliest to mature .... $60 \quad 2.00 \quad 6.00$

## CABBAGE-Continued

1 loz .4 ozs .1 lb .
Marion Market. Heads a little later and larger than Copenhagen Market
\$0.50 \$1.60 \$4.80
Racine Market. 65 days. Large round heads of blue-green color. Slow-bolting .. . 602.006 .00
Wisconsin All-Season. Good winter keeper; large, flat, hard heads
$\begin{array}{lll}.50 & 1.60 & 4.80\end{array}$
Bugner. 100 days. Round heads; average 10 lbs. 8 inches diameter. Excellent .... . 903.009 .00
Wisconsin No. 8. Resistant Hollander ... . 602.006 .00

STANDARD VARIETIES
In order of maturity.
Early Jersey Wakefield. Pointed heads.
Plants small, allowing close planting .... . . 40 1.20 3.60
Golden Acre. Extra early. Round heads, short stem, 64 days. Uniform, firm; matures evenly
$\begin{array}{lll}.45 & 1.50 & 4.50\end{array}$
Copenhagen Market. A very choice strain. Medium-sized heads; compact
$\begin{array}{lll}.45 & 1.50 & 4.50\end{array}$
Charleston. (Large Wakefield.) Heart shaped, average weight 4.5 lbs . .........
Early Dwarf Flat Dutch. Heads nearly round, firm; fine flavor and high quality. . 40 1.20 3.60
All Season. Best in hot, dry weather .... $40 \quad 1.20 \quad 3.60$
$\begin{array}{llll}\text { Late Flat Dutch. Good keeper, firm heads } & .40 & 1.30 & 3.90\end{array}$
Danish Ballhead. Penn State Strain
(Short Stem.) Best late variety, heads large, flat, solid; keeps until late spring. 105 days
$\begin{array}{lll}50 & 1.50 & 4.50\end{array}$

## BRUSSELS SPROUTS


(About 7000 seeds per oz.) Sow in March. Space $36 \times 18^{\prime \prime}$. 1 oz . 4 ozs .1 lb .
Long Island Imp. 90 days. Stem
closely set with $11 / 2$ in. round cabbagelike heads. $20^{\prime \prime}$ tall, good keeper
$\$ 0.45$ \$1.50 \$4.50

## CABBAGE

## (Danish Grown)

(About 7000 seeds per oz.) Sow in Feb.-March for the first crop and in June for a fall crop. Space earlies $24 \times 18^{\prime \prime}$, late $36 \times 20^{\prime \prime}$. Days indicated are from the date the plants are set out. Handling cabbage plants in plant bands will prevent premature heading.

> YELLOWS RESISTANT VARIETIES
> In order of maturity.

1 oz . 4 ozs. 1 lb.
Jersey Queen. 63 days. The resistant Jersey
Wakefield. Heads are solid, conical...$\$ 0.45 \$ 1.45$ \$4.35
Golden Acre Resistant. 65 days. Resistant
Golden Acre type. Medium small, round heads
$\begin{array}{lll}75 & 2.50 & 7.50\end{array}$

## SAVOY and RED CABBAGE

Chieftain. 85 days. Heads medium large; flat and firm. Crimped leaves
$\begin{array}{lll}.50 & 1.50 & 4.50\end{array}$
Mammoth Rock Red. Best red variety... $50 \quad 1.50 \quad 4.50$

## CARROT

( 1 oz. for $300-\mathrm{ft}$. row.) Sow as early as the ground can be worked and make successive plantings until Aug. 1st. Space rows 12 to $18^{\prime \prime}$ 。

$$
1 \text { oz. } 4 \text { ozs. } 1 \mathrm{lb} .
$$

- Amsterdam Forcing. Roots reddish orange, 6 in., uniformly tapered. Best for forcing. About 2 weeks earlier than other varieties
\$0.35 \$1.20 \$3.60
Chantenay Red Cored. Tapering ….. . 30 . 902.70
Danvers Half Long. Tapering . . .. . . . . 30
$.90 \quad 2.70$
Hutchinson. Latest and largest variety . . 30 . $90 \quad 2.70$
Morse's Bunching. (All-America Award) . 30 . 902.70


## Vegetable Seeds for Florists (Continued) CAULIFLOWER

(About 7000 seeds per oz.) We offer only genuine Danish grown seed, recognized as the world's finest. Sow in February or March for plant sale. To insure unchecked growth and sure heading plants should be handled in plant bands or pots. Space $18 \times 24 \mathrm{in}$. Days indicated are from date plants are set out.
Danish Giant Dry Weather. Select. 70 days.

- Early Snowball "A." 55 days. Standard early. Fine for green. house forcing, frame or outdoor culture. See cut at right.
Snowball "X."" 65 days. Well adapted for use under a wide range of conditions. Heads large, firm and pure white.
Snowdrift. 65 days. Larger than Snowball; firm and well protected by inner leaves. Good for distant shipping.
Prices of above 4 , each: tr. pkt., $40 \mathrm{c} ; 1 / 4 \mathrm{oz} ., 80 \mathrm{c} ; 1 \mathrm{oz} ., \$ 2.40$; 4 ozs., \$8.00; 1 lb., \$24.00.


## CELERIAC

l oz. 4 ozs. 1 lb .
Large Smooth Prague. Turnip-rooted Celery. Excellent winter keep. er. $1 / 4$ oz., 250
\$0.75 \$2.35 \$7.00

## CELERY

(About 8000 plants per oz.) Sow in Feb. or March for plant sales. Cover seeds lightly. Space $6 \times 28^{\prime \prime}$. Days indicated are from date of planting.

$$
1 \mathrm{oz} . \quad 4 \mathrm{ozs} . \quad 1 \mathrm{lb} .
$$

Golden Plume. Non-bolting. Select. 85 days. Desirable for home and market garden. $1 / 2$ oz, 65 c ................ $\$ 1.20$ \$4.00 \$12.00 Golden Yellow Self-Blanching. Dwarf. Standard market sort. $1 / 2 \mathrm{oz} ., 50 \mathrm{c}$. . . . $90 \quad 3.00 \quad 9.00$
Summer Pascal. 110 days. Uniform, thick, rounded stalks. Better than Giant Pascal. $1 / 2$ oz., 55c . . . . . . .......... $1.00 \quad 3.3510 .00$
Utah or Salt Lake, 115 days. An improved No. 99. Midseason, full hearted and compact. $1 / 2$ oz., 55 c ................. $1.00 \quad 3.3510 .00$

## CHIVES


(Grass-Onion.) A perennial, quickly started from seed. Popular for flavoring and borders. $1 / 4$ oz., $30 \mathrm{c} \ldots$. $90 \quad 3.00 \quad 9.00$

## CORN

Golden Bantam. 79 days . . . . . . . . . $\$ 0.15$ \$0.45 $\$ 4.00$
Golden Cross (Hybrid). 85 days . . . . . 20 . $60 \quad 5.50$

- Foremost Hybrid No. 1. (New). 67 days.

Unusually high yield of 8 -inch ears on
5 -ft. plants. Golden yellow.
$\begin{array}{lll}35 & 1.00 & 9.00\end{array}$
Stowell's Evergreen. 95 days. White . . . 15 . 454.00

## CUCUMBER

(About 1000 seeds per oz.). 1 oz. for 80 hills or $200-\mathrm{ft}$. row. Distance between rows 3 to 6 ft .

## - BALL EARLY HYBRID

[ (f) HVBRIDS New, heavy yielder. Size similar to "Straight $8^{\prime \prime}$, color dark green. It is a white spined, slicing type, earlier than Burpee Hybrid and has some resistance to downy mildew and mosaic.
Tr. pkt., 50c; $1 / 4 \mathrm{oz}$., $\$ 1.40 ; 1 \mathrm{oz}$, $\$ 4.20$; 4 ozs., $\$ 12.50$.
$1 \mathrm{oz} .4 \mathrm{ozs} . \quad 1 \mathrm{lh}$.
Chicago Pickling. 6 in. 60 days.....$\$ 0.25 \$ 0.85 \$ 2.50$ Imp. Long Green. Ideal slicer. 12 in .


## CAULIFLOWER SNOWBALL "A"

## CUCUMBER, Continued

l oz. 4 ozs. 1 lb .

- Seedless Supreme. Best of the European forcing types. Will also do well outdoors. Form 12-14 in. fruits without pollination and is seedless unless pollinated. Dark green, disease resistant, very prolific when forced in high humidity at $75-85^{\circ}$ temperature. 100 seeds, $50 \mathrm{c} ; 1000$ seeds $\$ 4.50$. Small Gherkin. 2 in. long; very prolific. . $\$ 0.30$ \$1.00 \$3.00

Straight 8. Deep green; ideal shipper
$30 \quad 1.00 \quad 3.00$

## EGGPLANT

(About 6000 seeds per oz.). Sow in February or March for plant sales. Space plants $18 \times 24$ in.

## BEAUTY HYBRID

 Hybrid to be considerably earlier and more productive than the regular Black Beauty. Fruits are a little more oblong and are produced on strong, erect plants. 1/8 oz., \$1.45; $1 / 4$ oz., $\$ 2.60$; $1 / 2$ oz., $\$ 4.30 ; 1 \mathrm{oz}$., $\$ 7.80$.

## loz. 4 ozs. 1 lb ,

Black Beauty. Popular market variety
Dark purple. Broad, egg-shaped …... $\$ 0.60$ \$2.00 \$6.00
Fort Myers Market. Oval fruits carried well above ground. Quite resistant to disease and excessive heat. $1 / 2$ oz., $45 \mathrm{c} \quad . \quad .80 \quad 2.70 \quad 8.00$
New Hampshire Early. Medium sized, oval fruits bred for northern climate. Pro lific
$\begin{array}{lll}85 & 2.85 & 8.50\end{array}$

## ENDIVE

( 1 oz . for $100-\mathrm{ft}$. row.) Sow in April or June-July for fall crop which may be kept for several months if taken up with soil before killing frost, packed closely and stored in basement.

1 oz. 4 ozs.
1 lb .
Full Heart Batavian (Escarolle) . ..... \$0.30 \$0.90 \$2.70

# Vegetable Seeds for Florists (Continued) <br> KALE <br> Danish Grown 

(About 7000 seeds per oz.)
Dwarf Green Curled. Very hardy ...... \$0.30 \$1.00 \$3.00

## KOHLRABI

(About 7000 seeds per oz.)

- Early White Vienna. Standard sort for forcing and home garden. Globe-shaped


## LEEK

(About 9000 seeds per oz.) More delicately flavored than the mildest Onion. Has a decided sweet flavor, Cooked and served like Asparagus. Grow for plant sale like Onions. Stores well; extremely hardy.

1 oz. 4 ozs. 1 lb .
Elephant. 150 days. 8-in. stems. Best
strain of this fine "Asparagus Onion"... \$0.45 \$1.50 \$4.50

## HERBS <br> Sell an Herb Garden!



Five plants each of the 10 varieties listed, ready for sale in Ball PlanTrays as shown in the picture below, make an ideal merchandising package. Or for the customer who wants to have more of one kind, have flats of 12 or 25 plants of one kind ready. More and more frequently home garden and housekeping magazines are stressing the use of herbs in cookery. Take advantage of this free publicity and let your customers know you are ready to fill their needs. Leaflets describing each variety with collection offers.

## Anise Basil Borage Coriander Dill <br> Sweet Fennel Savory

Prices above 7, each: tr. pkt., 15c; 1 oz., 60s.

## Sweet Marjoram

## Sage

Prices above 2, each: tr. pkt., 15c; $1 / 2$ oz., 60c.
Thyme. Tr. pkt., 15c; $1 / 4 \mathrm{oz} ., 60 \mathrm{c}$.

## COLLECTIONS

Tr. pkt., each of above 10 Herbs, \$1.00.
60 c pkt., each of above 10 Herbs (approximately the same number of seeds of each variety), \$5.00.



## LETTUCE

( 15,000 seeds per oz. $1 / 4 \mathrm{oz}$. for $100-\mathrm{ft}$. row.) There is a premium on Lettuce PLANTS. They are readily transplanted in plant bands and heading varieties will make large solid heads, if set out early, even before late frost is over. Sow March 15 or 4 weeks before setting out plants. Space $14 \times 18$ in.

FORCING VARIETIES
Approximate growing time $60-90$ days. Temperature $50^{\circ}$. Trans plant. Sow any time.

1 oz .4 ozs .1 lb.

- Grand Rapids Forcing. Mildew-resistant. The standard LOOSE-LEAVED variety for greenhouse forcing. Tender and sweet. Best early
$\$ 0.25 \quad \$ 0.80 \quad \$ 2.40$
© Bibb Forcing. Butterhead type of finest flavor and well adapted to greenhouse culfure. Demands even temperature, more so than Grand Rapids
$30 \quad 1.00 \quad 3.00$

STANDARD VARIETIES
Big Boston. HEADING; used for spring and fall hotbed and cold frame culture. .
Great Lakes. New outstanding HEAD lettuce; slow to bolt. "All-America" winner $50 \quad 1.70 \quad 5.10$
Imperial No. 44. Sure HEADING Iceberg type. Recommended for plant sales
$50 \quad 1.60 \quad 4.80$

New York No. 12. Early sure HEADING Iceberg type. Does well in midsummer. . $50 \quad 1.60 \quad 4.80$
Oak Leaf. Rather indefinite HEADS; medium sized. Leaves deeply lobed

| 35 | 1.15 | 3.40 |
| :--- | :--- | :--- |

Salad Bowl (New). LOOSE-LEAVED. All. America Gold Medal winner, 1952. Early (45 days), stands summer heat exceptionally well; slower to bolt than most other varieties. An improvement over Oak Leaf

60
$2.00 \quad 6.00$

## MELONS MUSKMELON

( 1000 seeds per oz.)

5Golden Delight. A.A.S. Large, early. Hard shell, small seed cavity .....
Iroquois. 86 days. Resistant Bender
type. Orange flesh
Pride of Wisconsin. 90 days. Thick, or-ange-fleshed, popular

## Vegetable Seeds for Florists (Continued) MELONS, Continued <br> WATERMELON $1 \mathrm{oz}, 4 \mathrm{ozs} .1 \mathrm{lb}$. <br> Harris Earliest. 80 days. Fruits oval ..... \$0.20 \$0.70 \$2.10 <br> New Hampshire Midget. Early ........ . 35 1.20 3.50

## MUSHROOM SPAWN

Lambert's Mushroom Spawn. I brick, 50c; 5 bricks, $\$ 2.00$; 10 bricks, $\$ 3.50$. Bricks weigh approximately 1 lb . and will plant 16 sq. ft.

## ONION

(About 9000 seeds per oz.)

$$
1 \mathrm{oz} . \quad 4 \mathrm{ozs} . \quad 1 \mathrm{lb} .
$$

Prizetaker (Valencia). Yellow, good
keeper, flesh mild. $1 / 2$ oz., 40c $\ldots . . . \$ 0.70$ \$2.30 $\$ 6.90$ Riverside-Utah Strain. (Yellow
Sweet Spanish.) Globe-shaped, keeping extra well for soft type. Midseason. $1 / 2 \mathrm{oz}$, 40c
Yellow Globe Danvers. Firm and hard; Yellow Bermuda (White Bermuda). Standard early. Flat, straw colored. $1 / 2 \mathrm{oz}$., 40c
$70 \quad 2.30 \quad 6.90$

## PARSLEY

$\square$
( $1 / 4 \mathrm{oz}$. per $100-\mathrm{ft}$. row.) Roots are transplanted from outside to 4 -in. pots or ground bed in cool house, or sow directly, $8 x 8$ in.

$$
1 \mathrm{oz} . \quad 4 \mathrm{ozs} . \quad 1 \mathrm{lb} .
$$

- Extra Triple Curled. 75 dáys. Closely curled, very compact and productive ... \$0.20 \$0.65 \$2.00
- Paramount. 90 days. The most dwarf and curled Parsley. Uniform dark green ... . 20 . 652.00


## PARSNIP

( $1^{1} / 2$ ozs. per $100-\mathrm{ft}$. row). Sow early, space rows 18 in . Roots hardy.

$$
1 \text { oz. } \quad 4 \text { ozs. } \quad 1 \mathrm{lb} .
$$

Short, Thick. 100 days. Finest and earliest strain. Pulls easily, sweet delicate flavor
$\$ 0.15 \$ 0.50 \$ 1.50$
Smooth White. 130 days. Evenly tapered
—whiter than "Hollow Crown" …....... . 15 . 50 1.50

## PEAS

4 ozs. 1 lb .10 lbs.
Alderman. 74 days. Tall $\$ 0.15 \$ 0.45 \$ 4.00$
Thos. Laxton. 62 days. Medium . . . . . . 15 . 454.00
Little Marvel. 64 days. Dwarf ..... . . 15 . 454.00

## PEPPER

(About 3000 seeds per oz.). Sow 6 weeks before outdoor planting. Germinate seeds warm. Space plants $16 \times 24 \mathrm{in}$. Days indicated are from date plants are set out.

California Wonder Select. (Sweet.) 72
days. Standard of excellence in Sweet
Peppers. Extra thick walls. $1 / 2$ oz., 40c... $\$ 0.75$ \$2.70 $\$ 7.50$ Chinese Giant (Sweet). 80 days. The largest Sweet Pepper. $1 / 2$ oz., $60 \mathrm{c} . . . . . .$. Golden Wonder. Golden fleshed California Wonder type. $1 / 2$ oz., 60c
$\begin{array}{llll}1.00 \quad 3.35 & 10.00\end{array}$
$1.00 \quad 3.35 \quad 10.00$ Harris' Early Giant. See Vinedale.
Hungarian Yellow Wax (Hot). Tapering, $61 / 2 \mathrm{in}$. long. Very early. Plants small, productive. $1 / 2 \mathrm{oz}$., 40c
Large Bell (Hot). 65 days. Ribs pungent, otherwise mild. $1 / 2$ oz., 40c Large Cherry (Hot). $1 / 2 \mathrm{oz} ., 40 \mathrm{c}$

| .75 | 2.50 | 7.50 |
| :--- | :--- | :--- |
| .70 | 2.40 | 7.00 |
| .70 | 2.40 |  |
| .60 | 2.00 | 6.00 |



PEPPER, YOLO WONDER

## PEPPER, Continued

Merrimack Wonder. (Mild.) Thick flesh.
Recommended where growing season is short. $1 / 2$ oz., 50c
. 0.95 \$3.35 \$9.50
Oakview Wonder (Sweet). 65 days. (Early
California Wonder.) 11/2 oz., 50c...... . $90 \quad 3.00 \quad 9.00$
Pimento (Perfection). (Sweet.) 72 days.
Fruits smooth, conical. $1 / 2$ oz., 45c; .....
Red Chili. Numerous $2-2 \frac{1}{2} \mathrm{in}$. long fruits.

| Borne upright. Very pungent. $1 / 2 \mathrm{oz} ., 40 \mathrm{c}$ | .75 | 2.50 | 7.50 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Romanian. (Sweet.) Yellow. 1/2 oz, 60c 1.003 .35
Ruby King (Sweet). 68 days. Very pro-
ductive, $1 / 2 \mathrm{oz}, 35 \mathrm{c}$
Sunnybrook. (Sweet.) Tomato-shaped
fruits. Turns scarlet-red earlier than most other Peppers. 70 days. $1 / 2 \mathrm{oz}, 40 \mathrm{c} . .$.
Sweet Banana. Early. Tapering, $61 / 2 \mathrm{in}$.
long. $1 / 2$ oz. 60c
$\begin{array}{llll}1.00 & 3.35 & 10.00\end{array}$
Sweet Bull Nose (Sweet Mountain). Mild
fleshed. 65 days. $1 / 2$ oz., 35 c
$\begin{array}{lll}.65 \quad 2.20 & 6.50\end{array}$
World Beater (Sweet). 70 days. Large, oblong, green, thick flesh. $1 / 2$ oz., 35c Vinedale. Sweet. All-America winner, 1952. Improves thickness, size, and smoothness of Harris' Early Giant. Best for northern climates. $1 / 2 \mathrm{oz} .50 \mathrm{5}$ c.
$95 \quad 3.35 \quad 9.50$
Yolo Wonder. (New.) 70 days. Mosaic resistant. $1 / 2$ oz., 75c. .
$\begin{array}{lll}1.35 & 4.40 & 13.50\end{array}$

## PUMPKIN

Small Sugar Pie. Early orange ....... . . 20 . 70 2.10
Large Yellow or Connecticut Field .... . 20 . 70 2.10

## RADISH

( 1 oz . for $100-\mathrm{ft}$. row.)

- Early Scarlet Globe (Short Top). Our strain of this very early forcing variety is a superior one. 23 days. An ideal florists' "catch crop."
- Icicle. (Short Top.) 27 days. Best white for outdoors and forcing

$$
.20
$$

$$
.45 \quad 1.35
$$

## RUTABAGA

American Purple Top

## SPINACH

( 1 oz . for 100 -ft. row.)
Giant Thick-Leaved (Nobel). 45 days .. . 15 . 30 . 80

Savoy-Leaved or Bloomsdale. 40 days .. 15 . 30 . 80

- New Zealand (Tetragonia). Picked thruout the summer. Suitable for greenhouse forcing in $50-60^{\circ}$ temperature


# Vegetable Seeds for Florists (Continued) <br> <br> SQUASH <br> <br> SQUASH <br> <br> TOMATOES, Continued 

 <br> <br> TOMATOES, Continued}

| (About 380 seeds per oz.) | 1 oz 。 | 4 ozs. | 1 lb . |
| :---: | :---: | :---: | :---: |
| Acorn (Improved Royal). 60 days. ter squash | $\$ 0.20$ | \$0.65 | \$1.90 |
| Buttercup. 100 days. Winter squash | . 20 | . 75 | 2.20 |
| Butternut. 100 days. Winter squash | . 40 | 1.25 | 3.75 |
| Early Prolific Straightneck. 50 days. mer Squash. Edible when 4 to 14 in. | . 20 | . 75 | 2.20 |
| Hubbard. Blue winter squash .. Uconn. Bush type Acorn Squash | .30 .30 | 1.00 1.00 | 3.00 3.00 |

Earliana. Medium size. deep scarlet, firm and smooth. 64 days. Fine early variety. . $\$ 0.90$ \$3.00 \$9.00
Early Detroit. Valuable for shipping. Pink, medium large, smooth fruit. 78 days … $60 \quad 2.00 \quad 6.00$
Firesteel. 70 days. Deep red, sure setting. Best under drought conditions
Garden State. 84 days. Smooth scarletred; larger than Rutgers. $1 / 2 \mathrm{oz}$., 50c...
Giant Tree or Potato Leaved. 90 days.
Extra large pink fruits often weighing 1 lb . or more. Tr. pkt., 50c; $1 / 4 \mathrm{oz}$., $\$ 1.20$
Globe. (Livingston's.) Heavy producer. Large purplish pink fruit; smooth and solid
Golden Queen. 83 days. Large yellow fruit; firm and smooth, mild flavor .....
Greater Baltimore. Midseason. Earlier than Stone, heavy producer, deep scarlet
Grothen's Globe. 68 days. Medium large, globular, bright red fruit. Wilt resistant
Gulf State Market. Very fine second early, crimson, medium size, very solid Italian Canner. See Red Top.

- John Baer, Certified. Standard all-purpose variety, second early, medium size, red . . June Pink. Earliest pink, early shipper. . Jubilee. Orange; non-acid. All-America bronze medal winner. $1 / 2$ oz., 50c
- Master Marglobe, Certified. Valuable for shipping and HIGHLY RESISTANT. 75 days. Extra select stock. $1 / 2$ oz. 55 c . . Marglobe. Regular stock Oxheart. 90 days. Extra large, heart-shaped, few seeds, mild flavor. $1 / 2$ oz., 60c
Pan American. 75 days. U.S.D.A. introduction. Extremely wilt resistant. Scarlet
Penn State Earliana. Extra early, red, large, smooth, mild and solid
Ponderosa. Extremely large; purplish pink, few seeds, mild flavor. 85 days. . . Pritchard (Scarlet Topper). Fine allaround variety, heavy yielder; second early; WILT-RESISTANT
Queens. Early, solid and prolific. Red ... 1.00
Red Top. Improved Italian Canner. Cylindrical, $3 \times 11 / 4$ inches. $1 / 4 \mathrm{oz} ., 35 \mathrm{c} . .$. .
Rutgers, Certified. Red, smooth, thick walls-firm and mild. Does well even at a low fertility level. Favorite in sandy soil . . Sioux. 70 days. Red fruit
$\begin{array}{lll}70 & 2.35 & 7.00\end{array}$
$3.60 \quad 12.00 \quad 36.00$
$\begin{array}{lll}.70 & 2.35 & 7.00\end{array}$
$\begin{array}{lll}65 & 2.20 \quad 6.50\end{array}$
1 oz. 4 ozs. 1 lb .
$\begin{array}{lll}.90 & 3.00 & 9.00\end{array}$
$2.70 \quad 8.00$
$\begin{array}{lll}50 & 1.70 & 5.00\end{array}$
$\begin{array}{lll}.90 & 3.00 & 9.00\end{array}$
$80 \quad 2.20 \quad 8.00$
$\begin{array}{lll}.90 & 3.00 & 9.00\end{array}$
$\begin{array}{lll}80 & 2.70 & 8.00\end{array}$
$\begin{array}{lll}90 & 3.00 & 9.00\end{array}$
$.60 \quad 2.00 \quad 6.00$
$\begin{array}{lll} & 95 & 3.20 \\ 9.50\end{array}$
$90 \quad 3.00 \quad 9.00$
$1.10 \quad 3.70$
$\begin{array}{lll}.65 & 2.20 & 6.50 \\ .90 & 3.00 & 9.00\end{array}$


## STANDARD VARIETIES

loz. 4 ozs. 1 lb .
Bonny Best. Unexcelled for all purposes.

Smooth and firm. 73 days
$\$ 0.60$ \$2.00 \$5.90
Break O‘ Day. Early WILT-RESISTANT, globe shaped. Heavy producer, flesh firm
Chalk's Early Jewel. 75 days. Heavy producer, scarlet-red, smooth and firm
Crimson Cushion or Beefsteak. Large, flat, bright scarlet; solid, very prolific .. $80 \quad 2.70 \quad 8.00$
Dwarf Champion. Treelike. Requires no support; medium size, solid pink fruit ...
Dwarf Stone. 81 days. Strictly dwarf, tree-
like, fruits bright red, smooth and solid

| .70 | 2.35 | 7.00 |
| :--- | :--- | :--- |
| .50 | 1.70 | 5.00 |
| .80 | 2.70 | 8.00 |
| .70 | 2.35 | 7.00 |
| .60 | 2.00 | 6.00 |

## VEGETABLE SEEDS FOR FLORISTS—Continued

## TOMATOES, Continued

Stokesdale, Certified. 75 days. Red. globular; fine canning variety …....... \$0.85 \$2.80 \$8.50
Stone. 85 days. Valuable for market and canning; heavy producer; deep scarlet
$\begin{array}{lll}65 & 2.20 \quad 6.50\end{array}$
Valiant. 70 days. Globe shaped large, smooth red fruits
Victor. 65 days. Extra early. Scarlet. Determinate vine, takes little room
Wisconsin No. 55. Red, early, and fine shipper. Large fruits with no shoulder cracks

Red Cherry Yellow Plum Yellow Pear Yellow Husk or Ground Cherry

## TINY TIM

A novel miniature Tomato that can be raised as a colorful, small pot plant in the home. Ideal appeal to the housewife as she can add a touch of color to her wintertime menus and have a plant at the same time. $1 / 1 \mathrm{oz} ., 50 \mathrm{c} ; 1 \mathrm{oz} ., \$ 1.50$; 4 ozs... \$4.50.

## TURNIP

1 oz . 4 ozs. 1 lb.
Purple-Top, White Globe
$\$ 0.15$ \$0.35 \$1.00

## 7, Hybrid Tamatoes!

Hybrid Tomatoes pay! On a recent test of 57 varieties at Brookings, South Dakota, Ball Extra Early Hybrid placed first on total yield of marketable fruits. Many florists who have tried this variety have written us praising its performance. Also adaptable for greenhouse forcing.

## (F) HYBRID

- Ball Giant Hybrid. (New.) Early, red, $71 / 2$-ounce fruits. The addition to our $\mathbf{F}_{1}$ Hybrid Tomatoes we have been looking for. An excellent producer of fine, solid red fruits. It is about two weeks later than our Ball Extra Early. Tr. pkt., \$1.40; 1/16 oz., \$3.20; 1/4 oz., \$10.65; 1 oz., $\$ 32.00$.
Big Boy Hybrid. 78 days. Fruit to $1 \mathrm{lb} .1 / 8$ oz., $\$ 6.00$; $1 / 4 \mathrm{oz} ., \$ 10.00$; $1 / 2 \mathrm{oz}$., $\$ 18.00$; 1 oz ., $\$ 35.00$.


## "GROWING GREENHOUSE TOMATOES"

Ohio State University Bulletin. Latest information and complete growing guide on greenhouse Tomatoes. Price 75c.

## 5 FinYerin

- Ball Extra Early. An $F_{1}$ Hybrid earlier than Earliana. Large fruits, extremely smooth. Bred for highest quality fruit, yield and earliness. Tr. pkt., \$1.00; $1 / 16 \mathrm{oz} ., \$ 2.25$; $1 / 4 \mathrm{oz} ., \$ 7.50$; 1 oz . $\$ 25.00$.
Burpee Hybrid. Medium-sized; average 8 ounces in weight. $1 / / \mathrm{oz} ., \$ 3.50 ; 1 / 4 \mathrm{oz} ., \$ 6.00 ; 1 / 2 \mathrm{oz}, \mathrm{S} \$ 11.00$; 1 oz.. \$20.00.


## Dakanese Groun Lily Bulles

## ALBUM (Speciosum)

White Rubrum
December to July Delivery

Per 100 Per Case

| 7-9 in., 250 | 00 | \$82.50 |
| :---: | :---: | :---: |
| 8-9 in., 200 bulbs per case | 45.00 | 82.50 |
| 9-10 in., 140 bulbs per case | 65.00 | 82.50 |

## RUBRUM (Speciosum)

## Carmine-Pink

December to July Delivery


Per 100 Per Case

## PLATYPHYLLUM

Less spotted than Gold Band
December to April Delivery
We prefer to Auratum

Per 100 Per Case
7- 9 in., 250 bulbs per case
\$20.00
22.50
$\begin{array}{ll}30.00 & 38.00 \\ 40.00 & 36.00\end{array}$
$9-10$ in., 140 bulbs per case

RUBRUM $\longrightarrow$ (Speciosum)


## AURATUM (Gold Band)

White, spotted crimson, gold stripes
December to March Delivery
Per 100 Per Case

|  | Per 100 | er Case |
| :---: | :---: | :---: |
| 7-9 in., 250 bulbs per case | \$18.00 | \$35.00 |
| 8- 9 in., 200 bulbs per case | 20.00 | 35.00 |
| 9-10 in., 140 bulbs per case | 25.00 | 32.50 |
| 10-11 in., 100 bulbs per case | 36.00 | 32.50 |



## GIGANTEUM

## White Trumpet

December to July Delivery
Per 100 Per Case
7- 9 in., 300 bulbs per case .......... $\$ 20.00 \quad \$ 50.00$ 8-10 in., 225 bulbs per case .......... $28.00 \quad 55.00$

All Japanese-Grown bulbs F.O.B. Chicago, Toledo, Philadelphia. Prices subject to change. Bulbs subject to crop.

## West Coast Bulbs

 CROFTSNovember to May
Case Lots Only
Size 7-8 in.
250 bulbs per case
Size 8-9 in.
200 bulbs per case
Prices on Request.

## ESTATE

December to May Delivery
Taller, later and freer flowering than Croft. Prefer for cutting. F.O.B. cold storage.

Per 100 Per Case
Size 6- $7 \mathrm{in} ., 300$ bulbs per case....$\$ 20.00$ \$52.50
Size 7- 8 in., 250 bulbs per case .... $25.00 \quad 55.00$
Size 8- 9 in., 200 bulbs per case .... $40.00 \quad \mathbf{7 2 . 5 0}$
Size 9-10 in., 150 bulbs per case .... $50.00 \quad \mathbf{7 0 . 0 0}$

## Ball Zuality Bulbs GLOXINIAS

## AMERICAN GROWN <br> Delivery January and February

F.O.B. California or Chicago. Minimum Order 100 Bulbs.

Emperor Frederic. Scarlet bordered white.
Emperor William. Violet bordered white.
Etoile de Feu. Scarlet.
Roi des Rouges. Dark crimson.
Blanche de Meru. Rose with white throat.
Princess Elizabeth. Blue with white throat.
Violacia. Soft violet.
Prince Albert. Dark violet.
Mont Blanc. White.
Tigrinia. Spotted and netted.

|  | PRICES |  |
| :---: | :---: | :---: |
| Size | Per 100 | Per 1000 |
| $11 / 4-11 / 2 \mathrm{in}$. | \$17.00 | \$150.00 |
| $11 / 2-2$ in. | 25.00 | 225.00 |
| 2 in. up | 32.00 | 300.00 |

## Tuberous Rooted BEGONIAS

## DOUBLE CAMELLIA FLOWERED

| AM | ERICAN | GROWN | BEL | GIAN G | ROWN |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Del | very Janua | ry-February | Delivery | y Decembe | -January |
|  | Californi | or Chicago | F.O.B. | B. West | hicago |
|  | mum order |  | Minim | orda | 0 bulbs. |
| Light S | Imon | White | Scarlet |  |  |
|  |  | Blush | Crimson |  | Imon |
| Flame | range | Pink | Yellow |  | nge |
| Dark S | Imon | Yellow | White |  |  |
| Cardinal | Red | Apricot |  |  |  |
| Dark Re |  | Orange |  |  |  |
| Scarlet |  | Rose |  |  |  |
| America | $n$ Beauty |  |  |  |  |
|  |  |  |  | Belgian |  |
| Per 100 | Per 1000 | Size |  | Per 100 | Per 1000 |
| \$ 9.50 | \$ 85.00 | $11 / 4 \cdot 1^{1 / 2}$ in | in. | . 7.00 | \$ 60.00 |
| 14.50 | 135.00 | $11 / 2-2$ in | in. | 11.00 | 90.00 |
| 19.00 | 180.00 | 2-21/2 |  |  | 0.00 |
| 27.00 | 255.00 | $21 / 2$ in |  |  |  |

## CANNAS

Quality 2- to 5-eye divisions for delivery January through spring 1955.

RED, GREEN FOLIAGE
President. Extremely large bright red flowers. Dwarf.
Rosemond Cole. Extremely large red.
RED, BRONZE FOLIAGE
Red King Humbert. Large, light red flower. Tall.
YELLOW, GREEN FOLIAGE
Richard Wallace, Large, solid yellow.
Yellow King Humbert. Large yellow variegated.
ORANGE, BRONZE FOLIAGE
Wyoming. Large dark orange. Medium.
PINK, GREEN FOLIAGE
City of Portland. Large pink. Medium.
Hungaria. Large, dark pink flower. Dwarf.
Copper Giant. Large salmon-pink. Tall.
PRICES: $\$ 6.00$ per $100 ; \$ 55.00$ per 1000 .
Minimum order 100,50 of a variety. 250 at 1000 rate.

## BELGIAN GROWN

Delivery December-January
F.O.B. West Chicago. Minimum Order 50 Bulbs.

Emperor Frederic. Scarlet bordered white.
Emperor William. Violet bordered white.
Etoile de Feu. Scarlet.
King of the Reds. Red.
Blanche de Meru. Rose with white throat.
Princess Elizabeth. Blue with white throat.
Violacia. Soft violet.
Queen Wilhelmina. Pink.
Mont Blanc. White.
Tigrinia. Spotted and netted.
Mixture of all above colors.

|  | PRICES |  |
| :---: | :---: | :---: |
| Size | Per 100 | Per 1000 |
| $11 / 4-1 / 2$ | . \$ 9.00 | \$ 80.00 |
| $11 / 2-2$ | 16.00 | 150.00 |
| 2 in . | 23.00 | 220.00 |

## CALADIUMS

January-February
Candidum. Snow-white; green veins and network. Green border. Stoplight. Shining crimson with bluish tint.
W. B. Haldeman. Bright pink with narrow green edge.

Lady in Red. Dwarf, shiny red leaf; bronzy hue.
Exposition. Bright red; dark green edge.
Macahyba. Moss-green, spotted lilac, with scarlet ribs. Red Flare. Similar to Scarlet Pimpernelle; blotched green. Crimson Wave. Green; crinkled, transparent crimson center. Red Ensign. Dwarf; leaves metallic red with green border.
Mrs. F. Sander. Dark green, blotched transparent deep rose.
Pink Cloud. Large, crinkled leaves of mottled pink.
Reconcavo. Rose center with carmine ribs.
Red Glory. Deep carmine, scarlet ribs and narrow green edge. Sunburst. (New.) Red and gold.
Sylvia Pierce. (New.) Cerise and rose.
Texas Beauty. (New.) Bronze and pink.
White Christmas. (New.) White and green.

## Caladium Prices <br> Named and Mixed Varieties

Size Per 100 Per 1000

$11 / 2-2$ in. diameter. No. 1 ....................... $17.50 \quad 150.00$
$2 \frac{1}{2}-3 \frac{1}{2}$ in. diameter. Jumbo ................... $27.50 \quad 250.00$
$3 ½$ in. up. Mammoth ......................... $35.00 \quad 325.00$
All Caladium tubers shipped f.o.b. Florida. Minimum order 50 bulbs.

[^2]

All our fibrous-rooted Begonias are grown in plant bands and shipped in Ball-pak

## Small Plants BEGONIAS FIBROUS ROOTED <br> $21 / 4-I n$. Available Fall to June

Adeline. Free flowering bright pink; dwarf.
Ball Deep Rose. Deep rosy red, changing to luminous pink during warm weather. Dwarf.
Luminosa Compacta. Dwarf. Popular scarlet-red. Ball Red. Dwarf. Medium flowers of bright scarlet. Indian Maid. Intermediate. Bronze-leaved scarlet. Carmen. Intermediate. Bright rose-pink flowers, bronze leaves.
Snowbank. Dwarf. Large, glistening white flowers. Assorted.
Prices: $\$ 12.00$ per $100 ; \$ 100.00$ per 1000. 250 at 1000 rate. Shipped in units of 50 in Ball-Pak. Minimum order 100; 25 of a variety. F.O.B. Michigan and Ohio.

## SNAPS

## 21/4-In. Available August thru March

All the varieties listed below, except Margaret, are $\mathrm{F}_{1}$ Hybrids
Rosanna No. 9 (Ball). A bright deep rose with long, tapering spikes.
Christmas Cheer. Extra early, productive, bright rose. Available till December 1.
Pensive. Flowers just after Christmas Cheer. Dark rose
Christina. One of the best all-purpose light pinks.
Pink Ice No. 31 (Ball). Bright pink with nearly white lips. A clean, firm grower with outstanding flower spikes. Early flowering and very attractive.
Hercules No. 21 (Ball). Light pink. Extra hard, clean stems.
Navajo No. 8 (Ball). We consider this the finest all-purpose red Snap available.
Golden Spike No. 1 (Ball). A rich, deep golden yellow with long tapering spikes and close-spaced florets. Best yellow for late winter and spring.
War Admiral. Excellent medium yellow for midwinter.
Snowman No. 5 (Ball). Excellent pure white for single stem or pinched crop. Popular wherever grown.
Margaret. Very productive ivory-white.
Lavender Lady No. 71 (Ball). A deep rosy lavender shade with excellent spikes and stems. For late winter and spring.
Gallant Fox. Very fine medium rosy bronze.
Prices all Snapdragon varieties:
$\$ 8.00$ per 100; $\$ 65.00$ per 1000. 250 at 1000 rate. Shipped in units of 50 in Ball-Pak. Minimum order 100; 25 of a variety. F.O.B. Illinois, Ohio and New York.

## CYCLAMEN

## 21/4-In. April-June

$\$ 22.00$ per $100 ; \$ 200.00$ per 1000. Minimum order 100 .

## 3-In. June-July

$\$ 36.00$ per 100; $\$ 350.00$ per 1000. Minimum order 50.

## 4-In. August-September

$\$ 70.00$ per 100 . Minimum order 25 .
Packing at cost.
F.O.B. New York, Wisconsin, Illinois, Minnesota and Michigan.

## PRIMULA OBCONICA

## 21/4-In. June-December Delivery

Fasbenders Red. Extra large flowered deep crimson-red. Muellers Berlin Rose (Muellers Rosea). Soft medium rose. Sky-Blue (Coerulea). Clear mid-blue.
White. Rather tall growth.
Prices: $\$ 12.00$ per $100 ; \$ 100.00$ per 1000. Minimum order 100 plants. F.O.B. Wisconsin.

## GERANIUMS

## 21/4-In. Delivery August thru Spring

Better Times. Cerise.
Imp. Ricard. Bright red.
Olympic Red. Scarlet-red.
Pride of Camden. Dark red.
Radio Red. Brilliant red.
Red Fiat. Bright red.
Red Barney.
Madam Landry. Bright salmon.
Pink Fiat. Salmon-pink.
Salmon Supreme. Salmon-pink.
Madam Buchner. White.
Madonna. White.
Enchantress Fiat. Appleblossom-pink.
Prices: $\$ 16.00$ per $100 ; \$ 150.00$ per 1000. Minimum order 100 of a variety. F.O.B. Shipping Point.

## ROOTED AND UNROOTED CUTTINGS

Enchantress Fiat. Appleblossom-pink.
Better Times. Cerise.
Imp. Ricard. Bright red.
Olympic Red. Scarlet-red.
Pride of Camden. Dark red.
Radio Red. Brilliant red.
Red Fiat. Bright red.
Madam Landry. Bright salmon.
Pink Fiat. Salmon-pink.
Salmon Supreme. Salmon-pink.
Madam Buchner. White.
Madonna. White.
Be sure to state type of Geranium cuttings wanted, rooted, or unrooted.
Prices: Unrooted Cuttings, $\$ 37.50$ per 1000 . Rooted Cuttings, $\$ 70.00$ per 1000 .
Minimum order 1500, 100 of a variety. Order in multiples of 100. 3000 can be shipped at a minimum air freight charge-please specify way to ship: air express, air freight. F.O.B. California.


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## CATALOG No. 70—SPRING 1955—BUSINESS TERMS

DISCOUNTS ON SEED ORDERS (Except Lawn Grass). Cash or C.O.D.
Discount! When cash is enclosed, or on C.O.D.'s: under $\$ 5.00$, net; $\$ 5.00$ to $\$ 25.00,5 \% ; \$ 25.00$ and over, $8 \%$. Bulbs, $2 \%$.

On Charge Seed Orders! If paid within 10 days from date of invoice: under $\$ 5.00$, net ; $\$ 5.00$ to $\$ 50.00,2 \% ; \$ 50.00$ to $\$ 100.00,5 \% ; \$ 100.00$ and over, $8 \%$. Bulbs, $2 \% 10$ days.

NO CASH DISCOUNT on Lawn Grass, Plants, Plant Containers, and other Supplies. These items cannot be sent C.O.D.
If this is your first order, it should be signed with some individual's name in writing. Payment should accompany all orders unless credit has been established. C.O.D. shipments $50 \%$ in advance.

All Prices in this catalog subject to change without notice.

All Seed Sent Prepaid to U. S., its possessions, or Canada-except on bulk grass seed and on orders weighing over 2 ounces where customer requests first class mail, air mail or other special carrier, extra shipping costs will be charged.
IMPORTANT. Make checks or money orders payable to Geo. J. Ball, Inc., WEST Chicago, Illinois. Not responsible for currency sent in the mail. Business Hours (holidays excepted) are 8 to 12 and 1 to 5 Monday through Friday: 9 to 12 Saturday. Our phone number is West Chicago 299.

THIS CATALOG IS FOR COMMERCIAL GROWERS ONLY.
Shortages. All items are offered subject to crop failures or shortages.
LIMITATION OF WARRANTY. Geo. J. Ball, Inc., warrants to the extent of the purchase price that seeds, plants, or bulbs sold are as described on the container within recognized tolerances. Seller gives no other or further warranty, express or implied.


## Since 1890

This 15 year old boy with a hoe obviously is visionary, so we must overlook his apparent "slow-down." This, his first greenhouse job, called for working about 11 hours daily for $\$ 8.00$ monthly, and with this he saved his first $\$ 100$. Not unusual those days, for thrift was not yet outmoded during the so-called "gay nineties." But those 5 little $12 \times 50 \mathrm{ft}$. flue heated greenhouses in the background, each with its little chimney, were of prime interest to him. To clean those flues it was his job to drag a small Christmas tree thru each one weekly. For ventilation 6 in . boards attached to the ridge were used, battening them down for winter, and fastening them open with the coming of spring. Watering was done with a can, of course. But our modern greenhouse business was in the making and great progress has been made over these 58 years.

Little could this day-dreaming boy visualize automatic ventilation, thermostatically controlled heating, and the automatic sub-watering principles of today. And little did he know about the single plant selection principle that later so interested him and that is so greatly improving greenhouse stock today. These innovations will be found in our above $2^{1 / 2}$ acres of glass. They are entirely devoted to growing and originating your finest, most valuable strains of-


[^0]:    - Burpee Orchid. An excellent, large flowered double, differing from Minuet mainly in its somewhat warmer, rose-lavender shade. Should be pinched for best plant habit.
    $1 / 2$ tr. pkt., $\$ 2.75$; tr. pkt., $\$ 4.50$; $1 / 128$ oz., $\$ 8.50$; $1 / 64$ oz., $\$ 16.00$.

[^1]:    PLEASE NOTE： $1 / 2$ tr．pkts，available only where listed．If the variety you want is not listed，send us your order and we will get it for you or suggest a satisfactory substitute．

[^2]:    _Fancy Leaf CALADIUM Collection
    January through May Delivery
    In display carton $24 \times 12 \times 6$ inches. Height of box with display lid raised, 191/2 inches. Standard pack, 150 bulbs; 25 to each compartment. Size of bulbs, standard No. l's ( $1 \frac{1}{2}$ to 2 in . diam.). Box contains 5 named varieties. One compartment assorted colors. Pictures on inside of lid are in full color. Bags included with each box, 25 in each compartment. Variety name and simple growing instructions on each bag. Weight per case approx. 24 lbs .
    150 Bulbs (Collection), No. 1 size, $\$ 26.00$, F.O.B. Florida. Suggested retail price 35 c each.

